SEVENTEENTH ANNUAL

ROBERT MITTELSTAEDT DOCTORAL SYMPOSIUM
PROCEEDINGS

April 3 – 5, 2008

Doctoral Research in Marketing

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ACKNOWLEDGEMENT

The Marketing Department would like to thank the Dean Cynthia Milligan and the Dean's Office in the College of Business Administration and the Qualitative Data Analysis Workshop for the partial financial support for this symposium. We also thank Michelle Jacobs for all of her assistance in organizing the symposium.

ROBERT MITTELSTAEDT DOCTORAL SYMPOSIUM

Dr. Robert Mittelstaedt retired on August 31, 2002, after 29 years of contributions to the University of Nebraska–Lincoln, College of Business Administration, Marketing Department and our graduate program.

Doctoral students share a common link to Bob. He was more than a fine educator, scholar, and academic citizen. He was also their mentor, friend, counselor, and supporter. He motivated them with his insights, kindness, and countless stories. He stimulated their ideas, made them smile, and warmed their spirits. In addition, Bob and Venita opened their home and hearts to many doctoral students and gave them many forms of moral support. Bob dedicated his career to doctoral education and has served as a role model to both doctoral students and junior faculty.

Bob also introduced macromarketing theory and issues to doctoral students and inspired them, for over 40 years. He has been more than a fine educator and scholar. His insights, seminars, and dedication to the Journal of Macromarketing and Macromarketing Conferences motivated their investigations of important issues in the field, presentations at the Conferences, and publications in JMM.

Despite being retired, Bob was lured back to the department for the 2004 and 2005 fall semesters to teach doctoral seminars.

At the time of Bob’s retirement, the faculty in the Department of Marketing decided to rename the Nebraska Doctoral Symposium to the Robert Mittelstaedt Doctoral Symposium in honor of Bob’s accomplishments at the University of Nebraska–Lincoln.
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Discussant: Ian Parkman, University of Oregon

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Gina Mohr, University of Colorado

Discussant:

“The Effect of Temporal Framing on Product Choice”
Andrea Heintz Tangari, University of Arkansas

Discussant: Iana Nelson, Arizona State University

“35% (or 85%) Believe Diet Pepsi Tastes More Like Real Cola: Do Numbers Matter?”
Namika Sagara, University of Oregon

Discussant: Anna Turri, University of Arkansas
PROGRAM

SEVENTEENTH ANNUAL
ROBERT MITTELSTAEDT DOCTORAL SYMPOSIUM
DOCTORAL RESEARCH IN MARKETING
APRIL 3 – 5, 2008

THURSDAY, APRIL 3 – AFTERNOON

Guests check in at the Embassy Suites, 1040 P Street, (402) 474-1111

THURSDAY, APRIL 3 – EVENING (DRESS CASUALLY)

7:00        Meet in lobby of Embassy Suites for ride to cocktail party
7:30 - 10:00 Cocktail Party
           Dwayne Ball & Shirley Noble home, 3120 Jasper Court
           Finger-foods will be served

FRIDAY, APRIL 4 – MORNING (DRESS PROFESSIONALLY)

Breakfast available for guests staying at the Embassy Suites

7:45 – 8:00        Welcome
       Dr. Jim Gentry, Mittelstaedt Doctoral Symposium Coordinator
       Dean Cynthia H. Milligan, College of Business Administration
       Dr. Robert Mittelstaedt, Nathan J. Gold Distinguished Professorship in
       Marketing, Emeritus

8:00 – 8:30        Amber Epp, University of Nebraska–Lincoln
       “Yours, Mine, and Ours: How Families Manage Collective, Relational,
       and Individual Identity Goals in Consumption”

8:30 – 8:40        Discussant: Caleb Warren, University of Colorado

8:40 – 8:50        General Discussion

8:50 – 9:00        Break

9:00 – 9:30        Fernando Jimenez, Oklahoma State University
       “The Dark Side of Emotional Attachment and Customer Co-Creation”
9:30 – 9:40  Discussant: Shannon Cummins, University of Nebraska–Lincoln
9:40 – 9:50  General Discussion
9:50 – 10:00  Break
10:00 – 10:30  Michelle Barnhart, University of Utah
  “Who Are You Calling Old? Negotiating Meaning in the Elderly Consumption Ensemble”
10:30 – 10:40  Discussant: Rand Wergin, Oklahoma State University
10:40 – 10:50  General Discussion
10:50 – 11:00  Break
11:00 – 11:30  Shrihari Sridhar, University of Missouri
  “Personal Selling Elasticities: A Meta-Analysis”
11:30 – 11:40  Discussant: Greg McAmis, University of Oklahoma
11:40 – 11:50  General Discussion
11:50 – 1:00  Lunch at the Embassy Suites

**Friday, April 4 – Afternoon**

1:00 – 1:30  Ze Wang, University of Kansas
  “’All Smiles are not perceived equal.’ Customers’ Responses to Employees’ Affective Display at Different Service Encounters”
1:30 – 1:40  Discussant: Yaowei Hao, University of Nebraska–Lincoln
1:40 – 1:50  General Discussion
1:50 – 2:00  Break
2:00 – 2:30  Abdullah Sultan, Washington State University
  “The Relationship between New Brand Information Exposure and Future Purchase Intentions: The Moderating Role of Brand Implicit Image”
2:30 – 2:40  Discussant: Abdullah Al Jafari, Oklahoma State University
2:40 – 2:50  General Discussion
2:50 – 3:00    Break

3:00 – 3:30    Katherine Loveland, Arizona State University
              “Nostalgia: How Looking to the Past Helps Ease Us Into the Future”

3:30 – 3:40    Discussant: Don Lund, University of Missouri

3:40 – 3:50    General Discussion

3:50 – 4:00    Break

4:00 – 4:30    Rebecca Trump, University of Arizona
              “Self-Brand Overlap and Dissociation in Cognitive Structure”

4:30 – 4:40    Discussant: Hyun Jeong Min, University of Utah

4:40 – 4:50    General Discussion

4:50 – 5:00    Break

5:00 – 5:30    Meet the Editors of the Journal of Retailing
              Dr. Jim Brown and Dr. Rajiv Dant

FRIDAY, APRIL 4 – EVENING (DRESS CASUALLY)

6:30 – 9:00    Evening Reception and Banquet, Embassy Suites
              6:30 - Cocktails
              7:00 - Banquet
              8:00 - Presentation, Dr. Alka Subramanian, Nebraska Ph.D. Alum and Executive Director, Power of Love Foundation

9:00 – late    On your own

SATURDAY, APRIL 5 – MORNING (DRESS PROFESSIONALLY)

Breakfast available for guests staying at the Embassy Suites

8:00 – 8:30    David Raska, Washington State University
              “When Brands Go Green, Pessimists Don’t Follow: Perceived Sincerity and the Impact of Energy Saving CSR Initiatives on Customer’s Intention to Save Energy”

8:30 – 8:40    Discussant: Ian Parkman, University of Oregon
8:40 – 8:50  General Discussion

8:50 – 9:00  Break

9:00 – 9:30  Gina Mohr, University of Colorado
“Conflict and Coping: An Investigation of Consumer Conflict in Negatively Correlated Choice Environments and the Role of Compromise Products as a Means of Coping”

9:30 – 9:40  Discussant: Amy Stokes, University of Arkansas

9:40 – 9:50  General Discussion

9:50 – 10:00  Break

10:00 – 10:30  Andrea Heintz Tangari, University of Arkansas
“The Effect of Temporal Framing on Product Choice”

10:30 – 10:40  Discussant: Iana Nelson, Arizona State University

10:40 – 10:50  General Discussion

10:50 – 11:00  Break

11:00 – 11:30  Namika Sagara, University of Oregon
“35% (or 85%) Believe Diet Pepsi Tastes More Like Real Cola: Do Numbers Matter?”

11:30 – 11:40  Discussant: Anna Turri, University of Arkansas

11:40 – 11:50  General Discussion

11:50 – 12:00  Closing

12:00  Box lunches will be available for those who requested them
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April 3 - 5, 2008

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YOURLS, MINE, AND OURS:
HOW FAMILIES MANAGE COLLECTIVE, RELATIONAL, AND INDIVIDUAL IDENTITY GOALS IN CONSUMPTION

Amber M. Epp, University of Nebraska–Lincoln

ABSTRACT
Families regularly engage in consumption activities that help to define who they are as a family. Within families, a set of relationships co-exist (family, siblings, couples, parent-child, and so on) that shape families’ choices. In order to be relevant to families, firms must understand what they are trying to accomplish in their relationships. Research questions included 1) what identity-related goals do families express in their consumption stories; 2) how do families use marketplace resources (i.e. brands, products, and services) as they manage the interplay among family, relational and individual identity goals; and 3) under what conditions do families alter their consumption strategies as they manage these goals? Based on depth interviews with 88 family members from 21 families, I gathered collective vacation narratives to develop a grounded theory of identity management that explains families’ approaches to managing multiple identity goals, identifies how families enlist marketplace resources, outlines marketing outcomes, and delineates conditions that alter this process. As the framework emerged from attention to relational and collective units within the family, rather than solely to individuals, it offers a different lens for examining core marketing concepts.

IDENTITY STUDIES

Collective Identity
Research examines collective identity for brand communities (Algesheimer, Dholakia, and Herrmann 2005; Muniz and O’Guinn 2001), consumption micro-cultures (Sirsi, Ward, and Reingen 1996), subcultures (Holt 1995), and non-brand-focused communities (Belk and Costa 1998; Kates 2004; Kozinets 2002). These studies, at least in part, address how communities coalesce around actions that reflect their collective identities. Unlike subcultures that voluntarily organize around consumption activities (Schouten and McAlexander 1995), families rely on social and kinship ties. However, in both cases, consumption serves as a resource for producing identities.

A smaller body of consumer research investigates family identity. Families engage in consumption practices to re-establish a sense of family following divorce (Bates and Gentry 1994), ensure continuity of family identity across generations (Curasi et al. 2004a; Moisio et al. 2005), and represent family as an aspect of one’s extended self (Belk 1988; Tian and Belk 2002). However, the construct has received little systematic definition and elaboration, despite consequential implications for consumer studies. As such, in the next section, I examine literature across disciplines to advance a detailed definition of family identity for use in a consumer setting.

What is Family Identity?
Implicit and explicit references to family identity appear in marketing (Bates and Gentry 1994; Belk 1988; Curasi et al. 2004a; Moisio et al. 2005), sociology (Bielby and
Bielby 1989), communication studies (Braithwaite, Baxter, and Harper 1998; Galvin 2003; Koenig Kellas 2003), family studies (Bennett et al. 1988; Blinn 1988; Fletcher 2002; Whiteside 1989; Wolin and Bennett 1984), and psychology (Bolea 2000; Fiese et al. 2002). From these studies, we learn families’ identities are multiple, contextual, and reshaped over time. In addition, I adopt the following formal definition, “Family identity is the family’s subjective sense of its own continuity over time, its present situation, and its character. It is the gestalt of qualities and attributes that make it a particular family and that differentiate it from other families” (Bennett, Wolin, and McAvity 1988; p. 212). Although each family has a distinctive bundle of identities, regardless of how varied families are in the actions used to define themselves, particular identity components are shared across families: structure, generational orientation, and character.

Structure indicates “who is in and who is out, both now and in the past” (Bennett et al. 1988, p. 213). This component reflects not only the boundaries of family membership, but also the hierarchy and roles of family members. “At a structural level, families have undergone major changes in organization, permanency, roles and size” (Daly 2001, p. 2). These changes impact both the numbers, sizes, types, and assortments of identity bundles that comprise family life and the numbers, sizes, types, and assortments of enactments that constitute these bundles. Researchers demonstrate that structure is negotiated and instantiated through consumption activities. For instance, boundaries are reflected in Wallendorf and Arnould’s (1991) theme of extensiveness of inclusion in Thanksgiving Day family rituals, in which the family members included in the celebration varies from year to year. Similarly, Bates and Gentry (1994) give examples of family portraits taken following divorce that mark changes in boundaries of family membership.

Generational orientation describes the beliefs and recollections about past history of family identity and depicts the reflective quality of families—that is “the extent to which a family understands its present condition as a part of a continuum over time,” preserving identity from generation to generation (Bennett et al. 1988, p. 214). Limited consumer research demonstrates that this component is recognized and valued among some portion of contemporary North American households and linked to consumption patterns and possessions (Curasi et al 2004a; Moisio et al. 2005). For instance, generations of family are linked together through consumption rituals such as viewing family photographs and storytelling that anchor a family to its past (Wallendorf and Arnould 1991); cherished possessions become inalienable wealth in families (Curasi et al. 2004b); and intergenerational influences may help establish brand equity (Moore et al. 2002). Families may differ with regard to attachment to family traditions from their past or in their commitment to incorporating new generations of family into these collective identity practices.

Family character is a third component of family identity that captures the day-to-day characteristics of family life (Bennett et al. 1988; Bolea 2000). Within the context of consumption research, family character descriptors might be eclectic with families giving differential definitional weight to shared activities (e.g. we’re a Green Bay Packers family), shared traits (e.g. we all laugh the same way), similar temperaments (e.g. we’re all impatient), common tastes (e.g. we all love the same genre music), common values
(e.g. we’re a patriotic family), and so on. In particular, extensive prior research links consumer values to consumption attitudes, behavior, and activities (c.f. Burroughs and Rindfleisch 1997; Kahle, Beatty, and Homer 1986; Richins and Dawson 1992). Scholars studying collectivities also agree that values are central to defining identity (Melewar 2003). Consumer researchers have not explored how the complex enactment of family character informs and directs consumption activities.

Collective-Individual Identity Interplay

In general, researchers treat family identity as a unified construct, without dealing with the complexities of multiple relational and individual identities. Although consumer researchers have not studied the collective identity bundles that comprise families, both individual and collective identity are the focus of a burgeoning array of consumer culture theory research (Arnould and Thompson 2005). Previous research examining the relationship between individual and collective identities most often contributes to understanding how individual members identify with and experience communities and how collectivities contribute to individual identity projects (Belk and Costa 1998; Celsi, Rose, and Leigh 1993; Firat and Venkatesh 1995; Kozinets 2001, 2002; Schouten and McAlexander 1995; Sirsi, Ward, and Reingen 1996). Studies of identification dominate investigations of individual-collective identity interplay, particularly within the last decade. Specifically, this stream of research reveals how individual member identification with focal groups such as subcultures (Kates 2002; Schouten and McAlexander 1995), microcultures (Thompson and Troester 2002), organizations (Bhattacharya and Elsbach 2002; Bhattacharya and Sen 2003; Reed, Aquino, and Levy 2007; Stahl 1964), and nations (Combes et al. 2001; Dunn 1976; Lantz et al. 2002) relates to identity construction processes.

Identification studies draw largely on social identity theory. Social identity is a psychological construct defined as “that part of an individual’s self-concept which derives from his knowledge of his membership in a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel 1981, p.225). Thus, in much research, we study the individual as a social self, where collective identity is implicitly housed or located in the individual’s knowledge of membership in certain groups. This reduces collectivities and relationships to elements of the individual self.

Researchers explain a variety of phenomena using social identity theory including the meanings of fashion brands (Auty and Elliott 1998; Elliott and Wattanasuwan 1998), material possession attachment (Kleine and Baker 2004), peer influence (Auty and Elliott 2001), posthumous identity construction (Bonsu and Belk 2003), donating activity (Bhattacharya, Rao, and Glynn 1995), attitudes toward brands (Auty and Elliott 1998), brand associations and choice (Auty and Elliott 2001; Burgess and Harris 1999; White and Dahl 2007), consumer divergence (Berger and Heath 2007), and member identification based on organizational and product characteristics (Bhattacharya et al. 1995). Although these studies reveal much about consumption outcomes related to individual identification with a group, social identity theory does not provide a framework or language for studying identity at relational or collective levels.
Managing Identity Interplay

Multiple Individual Identity Interplay

As my study examines the interplay of individual, relational, and collective identity, I review relevant research addressing identity management. Related consumer research almost solely considers individual identity tensions. Scholars commonly believe that the self is multi-dimensional, resulting in studies that explore the multiple, diverse, and sometimes competing aspects of identity (Sirgy 1982). For example, consumer researchers operationalize identity using concepts of a core and extended self (Belk 1988), drawing on situational selves based on role theory perspectives (Kleine and Kernan 1991), investigating comparisons of real, actual, and ideal selves (Dolich 1969; Landon 1974; Malhotra 1981), priming independent versus interdependent selves to predict various outcomes (Aaker and Lee 2001; Mandel 2003; Swaminathan, Page, and Gürhan-Canli 2007), and exploring fragmented and multiple identities of postmodern consumers (Firat and Venkatesh 1995). For instance, Mick and Demoss (1990) recognize that self-gifts represent messages between the multiple selves within each of us.

This multiplicity of selves raises questions about tensions among competing identities. Despite the recognition of identity fragmentation, empirical research demonstrates that individuals strive for a coherent sense of self (Ahuvia 2005; Arnould and Price 2000; Murray 2002; Thompson and Hirschman 1995). Further, consumers actively manage multiple identities through consumption practices (c.f. Ahuvia 2005; Murray 2002; Oswald 1999; Thompson and Hirschman 1995; Thompson and Tambyah 1999; Tian and Belk 2005). Specifically, consumers construct coherent consumer identity narratives in stories about loved possessions using three strategies: demarcating, compromising, and synthesizing (Ahuvia 2005). Based on a set of depth interviews about consumers’ loved possessions, Ahuvia (2005) found participants’ discourses evidenced identity conflicts (e.g. among lifestyle identities such as musician versus business woman). In turn, loved collections offered a potential solution to identity conflicts, as the objects could assert both ends of the contradiction simultaneously (Ahuvia 2005). To create a coherent self narrative, participants demonstrated three strategies: 1) demarcating refers to endorsing one identity over another by claiming love for objects that reinforce a particular identity and rejecting objects that reinforce a different identity; 2) compromising refers to finding a middle ground between two identities; and 3) synthesizing refers to novel approaches to identity management that sometimes result in a new identity and “occurs when an object or consumption activity successfully combines the previously conflicting aspects of the consumer’s identity” (Ahuvia 2005, p. 181). In a related study, immigrant family members use goods to move between one cultural identity and another. As the immigrants straddle the boundaries of two cultures and manage overlapping identities, they move in and out of diverse roles and cultural frames (Oswald 1999). Oswald outlines code switching behavior (i.e. language, food preparation, and dress) that allows one to move between cultures depending upon the situation. Similarly, expatriate professionals explore the use of consumption to manage identity tensions and conflicts, striving to enact a cosmopolitan identity while preserving ties to home and seeking communal affiliation (Bardhi 2004; Thompson and Tambyah 1999). These authors examine identity projects from a poststructuralist perspective, which suggests that identity is constituted within ideological systems. Findings reveal
often conflicting consumer meanings and goals in the quest for cosmopolitan identity, specifically suggesting tensions between meanings of travel and dwelling (Thompson and Tambyah 1999). Finally, employees demarcate the home-work boundary by deciding what aspects of their individual identity to display in the workplace (Tian and Belk 2005). Although much of the research linking identity management to consumption focuses on individual identity, some of these same processes may be central to managing interplay among and between collective, relational, and individual identities as well.

Multiple Collective Identity Interplay

Despite a lack of attention in consumer research, organizational scholars shed some light on the management of multiple collective identities. For instance, Pratt and Foreman (2000) introduce a framework for classifying management responses using identity plurality (referring to the number of identities maintained) and identity synergy (referring to the relationships among the identities). Specifically, Pratt and Foreman (2000) conceptualize four categories of response strategies: compartmentalization, aggregation, deletion, and integration. In this conceptual paper, the authors outline propositions to demarcate the conditions under which each of the response strategies is appropriate, including support by the stakeholders of the existing identities, resource constraints and compatibility, and interdependence or diffusion of the identities within the organization.

Although research on identity interplay offers support for the assumption that consumers use marketplace resources to manage identity within individuals or collectivities, previous research does not investigate processes of identity management across different conceptual groupings of identity. In the following section, I introduce a relational model of family identity management that highlights interplay among bundles of identities. I selected the term “bundles,” rather than the more common conception of identity “levels” to de-emphasize a hierarchical structure. Using this language, relational identities of siblings, for instance, exist beside and not within the collective identity of the family. Although these bundles may, and often do, overlap with one another, separation—the potential for identity bundles to be distinguished from one another—is central to this framework. A primary benefit of this reconceptualization is that it forces scholars to move beyond the notion of the individual as embedded within other levels of identities (as assumed in social identity theories, systems theories, and Belk’s (1988) view of the extended self), and instead, consider how these identities relate to one another, directing attention to synergy and discord in ways that were not possible in embedded structures.

Our current theories are inadequate for thinking about managing multiple and diverse identity bundles. Central to this relational theoretical lens is a move away from individual to relational identities, goals, and enactments as the focal units for analysis (Gergen 1996). Rather than viewing families as collections of individuals, my proposed model views families as a collectivity that is further comprised of bundles of relationships each with distinctive identities, discourses, rituals, symbols, and experiences that are enacted as complementary, overlapping, and competing consumption practices.
RELATIONAL MODEL OF FAMILY IDENTITY MANAGEMENT

Communication Forms and Symbols

The social context of family life shapes and limits families’ collective identities that are constituted and enacted through the interaction of various communication forms and symbols. Families constitute, revise, reinforce, and pass on identity in the performance of family rituals (Baxter and Braithwaite 2002; Bennett et al. 1988; Bolea 2000; Bossard and Boll 1950; Imber-Black, Roberts, and Whiting 1988; Wolin and Bennett 1984), narratives (Bennett et al. 1988; Bolea 2000; Bochner, Ellis, and Tillman-Healy 2000; Langellier and Peterson 1993; Sillars 1995; Stone 1988), social dramas (Carbaugh 1996; Chatzidakis et al. 2004; Turner 1980), everyday interactions (Baxter 2004; Whitchurch and Dickson 1999; Wood 2000), and intergenerational transfers (Bolea 2000; Curasi et al. 2004b; Moisio et al. 2005).

Families’ lived experiences commonly reflect these as overlapping and mutually reinforcing forms of enactment that jointly constitute family identities. By shifting the lens to a relational view of families, we expose how families enact an array of forms to constitute both collective and relational identities. This highlights the seepage among and between the different forms and the priority of various forms within family life. Consider a family that defines itself as adventurous and spontaneous. This family may go skydiving together as part of an annual ritual, repeatedly tell stories about their adventures, and pass from generation to generation the pin used to open their great-grandfather’s parachute on his first jump. Examining forms jointly reveals how they work together (and could potentially contradict one another) to inform the family’s identity, thus blurring the lines between enactment forms.

Consumers’ purchase, consumption, and disposal of products, brands, possessions and even services/places serve as symbolic resources for family identity enactment. Objects are treasured as powerful symbols of family and not merely individual identity (Curasi et al. 2004b). Shared consumption symbols serve multiple functions in that they contain memories or feelings that link us to our sense of past (Belk 1991; Curasi et al. 2004b); verify important moments of personal history through semiotic principles of indexicality (Grayson and Shulman 2000); act as transitional objects (Belk 1992; Mehta and Belk 1991; Myers 1985; Noble and Walker 1997); express the material values of their owners (Richins 1994); define group membership (Belk 1988; Grubb and Grathwohl 1967); act as tie-signs that communicate relational identity (Goffman 1971); offer a means both to integrate and differentiate one from others (Wallendorf and Arnould 1988); and communicatively portray different aspects of identity (Kleine et al. 1995). Individuals, relational groupings, and family units distinguish whether and how possessions symbolize their identities. Although previous literature suggests that consumption symbols are embedded in communication forms, this boundary is fluid and permeable.

Moderators Related to Family, Relational, and Individual Identity Interplay

In this section, I propose three concepts that moderate how families manage identity based on previous empirical studies (Epp and Arnould 2006; Epp and Grossbart 2006; Epp and Price 2006). These moderators acknowledge the complexity of a collective
construct that incorporates multiple identities residing in collectivities, smaller groups within the collectivities, and individuals. Within this interplay, I explore how families use marketplace resources to manage identity enactment processes. Any discussion of interfaces among identities must be bound by conditions that specify which identities are considered, at what point in time, and under what circumstances. Thus, for clarity and transparency, it is important to name the claimants, targets, and intended audience of identity and designate the time period to which the research refers (i.e. present, past, or future identity) (Pratt and Foreman 2000). For example, we could investigate family members’ (claimants’) descriptions of the siblings’ identity (target) being presented to other tourists (audience) on a trip to Disneyland (circumstance/time period).

Member Agreement

Bagozzi (2000) introduces the notion of agreement in conceptions of collective-level constructs by distinguishing between group intentions and individual intention directed toward group action. He posits that individuals can have we-intentions that are not shared by the other parties involved. Although collective enactments certainly shape individual members’ articulations about the collectivity, family members may differ in their descriptions of what constitutes the family’s collective or relational identities and whether and how those collective identities are linked to consumption symbols. How do individual family members describe their family to others? To what extent do these descriptions match those of other family members? I contend the level of agreement among family members will influence family identity enactment. Interestingly, Stone (1988) builds the following argument: “Usually this familial identity is not articulated or often said out loud, although the fact is that just about any given family member will, if questioned, define what it means to be a member of the family in ways that are at least roughly consistent with what other family members would say” (p. 34). This suggests that individual family members should both share and be able to articulate similar descriptions of collective identities. However, I would expect variation across families in the degree of agreement among family members about collective and relational identities. Agreement may moderate how families employ consumption activities to manage identity. For instance, a family with low member agreement might alternate more between representations of the family in selecting consumption activities or restrict collective enactment to a minimal set of agreed upon representations.

Commitment to Shared Identity Performances

Family members also may vary in their commitment to maintaining certain enactments of family identity. For example, kinkeepers may be especially important to endurance of forms and symbols of family identity enactment (Curasi et al. 2004a). What we do not know is whether and how the commitment of one family member to a particular collective enactment can compensate for the lack of commitment of other family members. However, it seems likely that different family members or collectivities may demonstrate commitment to competing identity enactments. In this case, some family members may feel they are primarily recipients of a designed and produced family enactment, such as a family-generated expectation to participate in sports, that is at odds with other relational identity enactments. Research across disciplines indicates that families display different levels of attachment to both family narratives and rituals.
(Bennett et al. 1988; Bossard and Boll 1950; Braithwaite et al. 1998; Cheal 1988; Roberts 1988; Wolin and Bennett 1984). Thus, it is reasonable to speculate that some shared identity performances are up for negotiation, while others are not.

Synergy and Discord among Individual, Relational, and Familial Identities

Another moderator of family identity enactment is the compatibility of individual family members’ identities with collective performances of family identity (or with each member’s enactments, activities, and discourses related to identity). As different interactions of the collectivity often do not include all members of the family, smaller collectivities develop relational identities based on their own history of shared experiences. Here I observe how enactments of individual and relational identities of family members correspond with and depart from enactments of collective identities. My assumption is not that family, relational, and individual identities will ever be static or in balance. Rather, tensions among these diverse identities are constantly in flux and family members and collectivities may employ consumption activities to construct, differentiate, or reform these identities. Imagine the merging of enactments when a blended family is formed. Stepsons who were not previously interested in sports may become fanatics about baseball to establish a relational identity with their stepfather. This activity gives them a common language and new shared interaction that re-frames who they are as a collectivity.

Synergy among individual, relational, and family identity may lead to a variety of outcomes related to family identity enactment. For instance, an examination of synergy among identity bundles might reveal that families whose identity bundles almost completely overlap will enact identity in much the same way whether individually, in small groups, or as a collective. Similarly, an examination of discord among identity bundles would clarify under what conditions families highlight collective identity over individual identity. Further, consumer researchers and service providers need to understand when one relational identity (father-daughter) takes precedence over another (couple). In addition, if little synergy exists among identities, we might see constraints in our choices for enacting family. For example, if family members believe in the importance of family dinners, but the spouses do not like to go out to eat and one child believes the family should not eat processed foods, the family’s choices for how to carry out that collective enactment are constricted. Family identity is negotiated within and among the individual and relational identities of family members as well. Families with children interested in music, for instance, may propose buying annual passes to the local symphony, but the image of a “musical family” may be alien to some family members.

Based upon the practical challenges to collective identity that highlight the importance of this study and the gaps I exposed in our theories of identity, I propose the following three research questions:

RQ1: What identity-related goals do families express in their collective consumption stories?

RQ2: How do families use marketplace resources as they manage the interplay among family, relational and individual identity goals?
RQ3: Under what conditions do families alter their consumption strategies as they manage family, relational, and individual identity goals?

RQ3a: How do families’ consumption strategies affect and how are they affected by member agreement among family members?

RQ3b: How do families’ consumption strategies affect and how are they affected by commitment to specific shared identity performances?

RQ3c: How do families’ consumption strategies affect and how are they affected by synergy and discord among identity bundles?

METHOD

In this section, I will outline my research approach for the study including the rationale and description of the substantive context, participants, data collection, and analysis. Much thought was given to each of the decisions reflected in this section, with a goal of achieving “methodological congruence” in which the purpose, research questions, and method flow logically from one another and present a cohesive whole (Morse and Richards 2002).

Overall approach and rationale

Two conditions led to my selection of grounded theory as the most appropriate approach for this study. First, as previously discussed, inadequate theories exist to explain the management of multiple and overlapping collective identity projects in consumer research. Second, my central research questions focus on the process of identity management and a grounded theory approach is particularly suited to investigate process-based research questions (Creswell 2006). Grounded in various sources of data from previous empirical studies (Epp and Arnould 2006; Epp and Grossbart 2006; Epp and Price 2005, 2006; Epp, Price, and Arnould 2008; Thompson et al. 2006), I have been working to develop a relational model of family identity management. However, a grounded theory approach is iterative in nature and requires continually collecting data, comparing categories, and revising interpretations until the process is understood (Sayre 2001). Currently, we still have much to learn about the consumption-based antecedents, strategies, intervening conditions, and consequences of family identity management. Thus, I view this study as an additional step toward this goal.

Consistent with a grounded theory approach, this study excluded a priori themes (Creswell 2006) and adopted an emergent design, allowing for shifts in the data collection process after entering the field (Creswell 2006; Wallendorf and Belk 1989). Grounded theory falls squarely in the interpretive research tradition. Thus, in addition to advocating an emergent design, I adhere to many other aspects of this perspective. For example, I present a holistic account of the identity management process that incorporates multiple perspectives and voices (Bochner 2002; Creswell 2006). Further, the interpretive tradition views the researcher as an instrument (McCracken 1988; Sayre 2001). Thus, throughout the process, I reveal my own assumptions and work to detail
how my background and worldview affects the study. Given the inductive approach to research employed in grounded theory, I appropriately take up the tenets of a hermeneutic approach, which calls for part-to-whole and whole-to-part interpretations (Thompson, Pollio, and Locander 1994).

**Context**

When selecting a context for this study, I limited my options to those that offered an interesting substantive case of the phenomenon of theoretical interest; focused on a consumption experience; allowed for variation among families; demonstrated practicality for sampling; and exhibited relevance to both families and service providers. The context of family vacations meets each of these conditions. Specifically, this context reflects the management of multiple identity projects in a consumption milieu bounded in a particular time and space. Family leisure helps families develop a sense of family identity (Shaw and Dawson 2001) and staging collective experiences serves the goals of producing family identity (DeVault 2000; Shaw and Dawson 2001). Families indicate that traveling with their families has become more important over recent years (71% strongly agree) and suggest that traveling gives time-poor families much needed time to bond (80% strongly agree) (Gardyn 2001). Thus, this is a context in which the explicit intention of taking a family vacation is often to enact or produce family relationships. This goal of “doing” family is especially important given the challenges to family identity discussed previously. Family vacations represent an increasingly relevant context for service providers as well. According to the Travel Industry Association of America (2006), “Travel and tourism generates $1.3 trillion in economic activity in the U.S. every year.” Recently, providers have noticed an increase in some overlooked niches in the family travel market including grandparent/grandchild, multigenerational, single-parent, and gay/lesbian family travel. Hotels, airlines, and other service providers have started adapting their offerings to accommodate these families (Gardyn 2001). Given that vacation destinations reflect a consumption context precisely about staging collective family consumption experiences, it seems an ideal context for this study. Finally, the family vacation context afforded a potentially high level of variability. Based on the trends noted above related to the variety of family travel experiences, I expected differences across families in identity management processes and relational goals of vacations. In addition to sample variability, this context allowed for the collection of multiple types of data. For instance, jointly-told family stories, family photo albums, vacation artifacts/keepsakes, and observation of family interaction during storytelling allowed for triangulation across data sets to inform the analysis and establish confirmability (Wallendorf and Belk 1989).

**Participants**

Type of sampling plan

Researchers employing a grounded theory approach typically use theoretical sampling, a form of purposeful sampling, by choosing cases that can “purposefully inform an understanding of the research problem” (Creswell 2006, p. 248). To provide boundaries on the sampling frame, I developed a few conditions for participation in the study. Qualified participants must 1) have taken a family vacation within the last two years, excluding those to visit other family members; 2) be willing to share stories about
their experience; and 3) consist of at least three members. The purposes of these conditions were to guard against difficulty in reconstructing the experience, bound the data by excluding other types of family interaction that may occur outside the vacation context, ensure that families can recall stories related to the experience, and include multiple identity bundles for investigation, respectively.

Consistent with an approach to building grounded theory, I began with a relatively homogeneous sample of families to construct the preliminary theory (Creswell 2006). This initial sample was limited to only two-parent families with preteen/teenage children. Despite the potential simplification afforded by studying only one family form, it stands to reason that families may demonstrate diverse and complex goals for managing family identity based, in part, on family structure. Thus, to capture this variability, in the second stage of data collection, I did not limit the study to any particular family form, and instead, sought cases that highlighted this variability (i.e. blended families, single-parent families, divorced families, adoptive families, etc.). This characteristic of the sampling plan ensured maximum variation (Miles and Huberman 1994). In addition, this diversity served to confirm or disconfirm the conditions under which the model being developed held (Creswell 2006). With regard to the practical issue of locating informants, I began by networking to locate willing participants (Sayre 2001). Following an initial group of informants, I used snowballing techniques to find additional families that met my criteria and further informed the research.

Units of analysis

In consumer research, empirical studies of family decision-making largely account for spousal (Davis, Hoch, and Ragsdale 1986; Ferber and Lee 1974; Park 1982; Su et al. 2003) or parent-child interaction (Isler, Popper, and Ward 1987; Palan and Wilkes 1997). Further, empirical studies of collectivities, across disciplines, rarely move beyond the dyadic level of analysis (for an exception, see Belch, Belch, and Ceresino 1985). As such, a need to expand beyond this level of analysis in consumer research on collectivities exists and merits further attention. To study collective identities requires collecting data from multiple members of the collectivity. Even researchers who elected to collect triadic family data highlight the importance and call for the collection of data from the entire family (Koenig Kellas 2005). Thus, the primary unit of analysis for this study was the family. The data collection procedure, discussed in the next section, produced both family-level data as well as afforded the ability to analyze smaller units such as relational dyads, triads, and individual family members. My study moves family decision research beyond the dyadic unit of analysis by collecting data from multiple family members.

As an important point of clarification, I adopt a broad definition of family: “networks of people who share their lives over long periods of time bound by ties of marriage, blood, or commitment, legal or otherwise, who consider themselves as family and who share a significant history and anticipated future of functioning in a family relationship” (Galvin, Bylund, and Brommel 2004, p. 6). This definition recognizes that family is socially constructed and culturally contingent (McGoldrick and Giordano 1996; Stone 2001) and acknowledges the diversity of membership assortments that comprise families such as blended, single-parent, gay, parenting from separate households,
polygamous, elective, and multi-generational or extended familial networks (Carsten 2004). Rather than relying on researcher-imposed definitions of family, participants in the study identified who they consider family in this context.

Sample size
In this study, I interviewed 88 family members, representing 21 families. I continued interviewing until theoretical saturation occurred in my data (Creswell 2006; Glaser and Strauss 1967). Of the 21 families, nine were traditional families (first marriage, biological children), five were blended families, four were single-parent families, and three were adoptive families. Parents’ ages at the time of the interview ranged from 28 years to 53 years with the mean age being 42.7 years. Children’s ages at the time of the interview ranged from 3 years to 26 years with the mean age being 11.7 years. All parents self identified as Caucasian, with the exception of one set of parents who identified as Hispanic and one father who identified as Chilean. Of the children, all were Caucasian, with the exception of one American Indian, two Black, two Asian, and three Hispanic. Additional details about families are offered in Table 2 of the Appendix, and pseudonyms were used to protect families’ anonymity.

Data Collection Procedures
Following much research conducted to date regarding family identity, I used open-ended depth interviewing techniques that incorporate family narratives (cf. Bolea, 2000; Wolin, Bennett, and Jacobs, 1988). My intent was to generate collective and relational narratives in order to gain an emic understanding of family identity from multiple perspectives and to explore the lived experiences of informants (Curasi et al. 2004; Wallendorf and Arnould 1991). As open-ended questions are likely to elicit narratives (Riessman 1993) and generate details and examples necessary for understanding context (Bylund 2003), interviews offered an appropriate method.

Justification of method
I selected family stories as my primary data source for many reasons. First, we build, understand, and produce our family identities through the communicative construction of family narratives (Bennett et al. 1988; Bolea 2000; Bochner et al. 2000; Kleine et al. 1995; Langellier and Peterson 1993; Schouten 1991; Sillars 1995; Stone 1988). Consumer researchers link consumption narratives to identity projects of both individuals (Ahuvia 2005; Escalas and Bettman 2000; Thompson 1996, 1997; Thompson and Tambyah 1999) and collectivities (Arnould and Price 1993; Curasi et al. 2004b; Kozinets et al. 2005; Thompson and Arsel 2004). Further, narratives help us deal with the contradictions we encounter in social life (Bochner 2002) and, specifically, aid in managing identity tensions (Ahuvia 2005). Recent work explores consumer narrative content and structure to help consumers make sense of their experiences with brands and products and construct a coherent life story (Ahuvia 2005; Escalas and Bettman 2000; Kleine et al. 1995). Taken together, these studies provide support for the value of analyzing consumption stories, but do not examine tensions among identity bundles.

Encouraging joint storytelling allowed me to focus on family identity construction in process, one of the central functions of narrative (Koenig Kellas 2005). This view is
important because it highlights narratives as constructive, not just representative (Escalas and Bettman 2000), performative, not just performance (Langellier and Peterson 2004), and affecting, not just reflecting identity (Bochner 2002). Family stories are never complete—“We are always in conversation with them” (Stone 1988, p. 8).

Stages of data collection

I employed two phases of data collection for this study: eliciting collective narratives and follow-up questions with the family, subgroups, and individual family members about their experiences. Interviews took place in participants’ homes in order to facilitate auto-driving techniques (McCracken 1989) and the duration ranged from 50 to 155 minutes with the average interview lasting 92 minutes. I obtained permission to videotape/audiotape the interviews to allow for detailed analysis and to capture the nonverbal interaction of family members. I also asked the family to gather any photos, video, keepsakes, or other materials they typically would use in telling their vacation story and requested that each family member write on a note card one memory from the trip (s)he wanted to make sure to talk about during the interview. We did not discuss the contents of the note cards until after the group telling. The note card was used as an introductory task to get family members to start thinking about the vacation and also as an individual measure that was taken before family members began co-constructing the group story. At the completion of the interview, I asked for permission to photograph artifacts obtained by the family while on vacation that emerged as central to their stories.

I began the interview by encouraging the family to share collectively the story of their most recent family vacation. During the initial telling, I provided nonverbal responses (e.g. nodding) to promote talk, but I refrained from asking questions in order to encourage the most natural telling (Markham Shaw 1997). After the family finished telling the story, I probed for more detail to gain a complete understanding of the experience such as who attended; what goals did families have for the vacation; how were decisions made; how was this vacation similar/different from other family experiences; and so on. Follow-up questions also incorporated auto-driving techniques, a form of photo elicitation, by showing vacation photos, recordings, and/or other memorabilia of family vacations to the families and asking them to give accounts or discuss the contents (Denzin and Lincoln 2005; Heisley and Levy 1991; McCracken 1989). In addition to asking about the most recent family vacation, I asked families to discuss their best family vacation and compare that vacation with the most recent one, if these reflect different vacations. In addition, I asked families to describe how these vacations are similar to and different from their other family activities. My intent was to uncover both the specific details of the vacation and context and the glosses families use to describe typical experiences (McCracken 1988; Sayre 2001; Spradley 1979).

After the family story, I asked follow-up questions with appropriate relational units or individuals within the family. The goal of the follow-up questions was to learn more about how family vacations were experienced differently by groupings or individuals within the family. This portion of the interviewing task involved my judgment about important viewpoints that were not sufficiently represented in the family interview. Subgroups chosen were alternated across families to ensure representation of couples,
siblings, parent-child, and other relational units. Collecting family, relational, and individual stories is important because this method uncovers both collective identities and interplay. Specifically, joint/collective storytelling is an appropriate method for determining how identities are co-constructed and differentiated, as it reveals family dynamics and communication processes. This interview procedure also allowed for the collection of other types of data to record family vacation experiences. Researchers advocate gathering stories using multiple types of information such as journal/diary, photos/memory boxes, and other social artifacts (Clandinin and Connelly 2000).

Each interview was transcribed verbatim to ensure that I captured participants’ precise descriptions of their experiences. In addition, I took substantial measures to maintain the quality of the data. Specifically, I used the videotaped interviews to verify that the text was attributed to the correct speaker and that the verbal text was accurate. Further, I added non-verbal communication (i.e. nodding, facial expressions, gestures, and so on) to the verbatim transcripts throughout the interview to obtain a rich and detailed perspective of family interaction prior to coding the data.

Data Analysis Procedures

Reissman (1993) argues that analysis of narratives can attend to three functions of language: 1) ideational, referring to the content or what is said; 2) interpersonal, examining the role of the relationship among speakers such as in joint storytelling; and 3) textual, referring to structure, syntax, and semantics. “Meaning is conveyed at all three levels” (Reissman 1993, p. 21). Adopting this perspective, my analysis consisted of an examination of content as well as narrative structure and employed multiple levels of analysis including within family and across families. In this study, “narrative is understood as a spoken or written text giving an account of an event/action or series of events//actions, chronologically connected” (Czarniawska 2004, p. 17).

Analysis of content

When examining interview and narrative content, I used an inductive approach to coding. Prior to beginning any analysis, I read through each interview transcript to gain a holistic perspective of each family (Braithwaite 1997; Sayre 2001) and wrote memos in the margins (Huberman and Miles 1994). Following grounded theory procedures (Strauss and Corbin 1990), my analysis began with open coding to reduce the data into meaningful segments. During this process, I performed the constant comparative method, in which data were used to create emergent categories and then subsequent data were compared to the existing categories for similarity or difference. I constructed new themes in the case of differences (Glaser and Strauss 1967). This approach attends to the principle that researchers seek to find theory to match the data (LeCompte and Goetz 1982). To assist in coding procedures, I enlisted the NVivo software program. Also, during this stage, I created a summary file for each family that included general notes about the family’s background and a visual depiction of the family’s identity bundles (that featured identity statements, brands/products/service and the roles families assigned these, and identity goals linked to each bundle). Once I had coded all the interview data into emergent categories, I performed axial coding procedures to examine interconnections among the categories and relationships with the central phenomenon.
(Strauss and Corbin 1990, 1998). Here, I examined antecedents, strategies, contextual and intervening conditions, and consequences of family identity management processes (Creswell 2006). Finally, I engaged in selective coding procedures to assemble a story that describes the relationships found in the data. This type of analysis is an ongoing, iterative process that required moving back and forth between theory and data (Spiggle 1994).

In addition to this inductive approach, I also coded for identity statements related to family, smaller collectivities, and individuals by adapting an existing coding schema (Koenig Kellas 2005) and allowing for additional emergent categories during analysis. Identity statements are defined as “any statements made during the telling of the story that somehow described or evaluated…roles, characteristics, personality traits, likes or dislikes, and abilities of the family” (Koenig Kellas 2005, p. 376). Specifically, I coded for family identity statements (e.g. “we are a family that loves to be outside”), selves-in-family identity statements (“Although our family loves the water, I just watched and sat on the beach, while the other three [family members] decided that they were going to take surfing lessons”), coalition identity statements (e.g. “we [couple] don’t judge each other”), other-coalition identity statements (e.g. “the girls are easy going and laid back”), other-individual identity statements (e.g. “he likes to watch sports”), and self-individual identity statements (“I’m an adventurous person”). Categorizing identity statements in this way allowed me to examine collective, relational, and individual identity projects and look within these codes to analyze goals and consumption activities related to these identities. When coding for collective, relational and individual goals, I relied not only on verbal constructions, but also on non-verbal communication to determine how to code the goal. This procedure addressed my first research question, “what identity-related goals do families express in their collective consumption stories?” Further, I looked across codes to examine how families use consumption to manage tensions among these various identities. This portion of the analysis addressed my second research question, “how do families use marketplace resources as they manage the interplay among family, relational, and individual identity goals?” In addition, the axial and selective coding procedures described above attend to my third research question by identifying intervening conditions and strategies related to family identity management, as depicted in Figure 1 below.
Analysis of structure

As narrative structure is rarely examined in consumer research (Escalas and Bettman 2000; for exception see Stern 1995; Stern, Thompson, and Arnould 1998), my current study contributes to an increasingly important area of work by focusing on the interaction behaviors of families during a storytelling episode. Paying attention to how the story is jointly told also helps us understand the management among family, relational, and individual identities (Koenig Kellas 2005), supplementing the content analysis used to address my first research question. Further, a few fundamentals of narrative structure including quality, genre, evaluative slope, and story elements have been linked to determining how central a particular narrative is to consumers’ goals and self concepts (Escalas and Bettman 2000).

In this study, I analyzed narrative structure in several ways. First, because of my interest in understanding identity management, I coded narratives to understand how a family presents itself as a unit or units (Burr 1990; Buehlman et al. 1996; Koenig Kellas 2005; Sayre 2001). Specifically, I would note whether a family emphasized collective, individual, or distinct identity bundles within the family using the following schema. Adapted from Buehlman and Gottman’s (1996) Oral History Interview, Koenig Kellas (2005) created the following coding schema for rating we-ness versus separateness for family-level data: (1) “Family members emphasize ‘we’ as opposed to ‘he/she’ or ‘I’;” (2) “Family members seem to present themselves as a collective more than as individuals; characters are presented as a family unit more than as individual and separate in the story;” and (3) “The family emphasizes similar values, beliefs, and goals in the story” (Buehlman and Gottman 1996, p. 19; Koenig Kellas 2005, p. 375). In addition to these elements, I assessed family interaction by creating an overall summary for each
family’s verbal and non-verbal behaviors. Specifically, I recorded dimensions of the joint storytelling process including the following: agreement among family members, turn-taking, monitoring for errors, engagement, and coherence (adapted from Koenig Kellas and Trees 2006).

Second, in response to my second research question regarding identity management, a useful way to understand how consumption fits into consumers’ identity projects is to analyze the role of consumption by breaking the consumption stories down into narrative elements and evaluating how central consumption is to the plot of the story (Escalas and Bettman 2000). Thus, I coded each story by examining a simple five-element plot structure (characters, setting, problem, actions, and resolution) to determine how consumption is presented in each story (Ollerenshaw and Creswell 2002; Yussen and Ozcan 1996), especially in relation to achieving an identity-related goal. For instance, when highlighting a relational identity of siblings, consumption may serve only as a backdrop, or it may be foregrounded as a central instrument to achieving a goal (resolution). To accomplish this analysis, following Escalas and Bettman (2000), I compared across story plots to determine the following: whether or not identity goals are mentioned, what role (if any) consumption played in achieving (or not) these goals, and whether the goals are linked to individual, relational, or family identity projects. In order to address the subparts of research question three that assume a reciprocal relationship between identity and consumption, I also coded for how consumption affected identity.

FINDINGS

Based on my analysis, I develop a grounded theory of family identity management that 1) highlights the interplay of families’ identity goals as antecedents, 2) identifies how families enlist marketplace resources in their identity-management approaches, 3) explains potential outcomes of this identity-management process linked to both families and marketers, and 4) outlines several conditions that may alter this process. My goal in this section is to address each of my three research questions using this general framework. Throughout this section, I have included verbatim statements from participants as exemplars of my findings.

In response to the first research question, I will begin by outlining nine primary identity goals that emerged from this research: building, trying out, transforming, re-asserting, preserving, assimilating, securing idealized, legitimizing, and concluding. Consistent with participants’ descriptions of the purpose and intent of their consumption experience, I adopt the following definition of identity goals: a conscious or unconscious pursuit (Coulter and Zaltman 2000, p. 264). For each of these identity-goal categories, families offered examples related to family, relational, and individual goals. Further, identity goals pertained to both the structure and character components of identity. For example, a preserving goal could refer to maintaining the structure of a particular relational unit (i.e. siblings) or it may refer to maintaining a specific practice related to character (i.e. camping). This is not surprising given that structure and character are undeniably entangled. However, it is useful to note that families sometimes foreground one or the other. In the former case, a family focuses on the importance of the relational
unit, possibly regardless of practice. In the latter case, a family focuses on the importance of the practice, without necessarily specifying the structural unit.

**Identity Goals: Family, Relational, and Individual**

The purpose of this section is to lay the groundwork for understanding families’ basic identity goals. Table 2 defines identity categories that emerged and offers examples of each. For each identity-goal category, the pursuit could be a family goal, a relational goal, or an individual goal. Although goals are listed separately, I will follow with a discussion of how these family, relational, and individual goals both overlap and collide within this consumption context.

<table>
<thead>
<tr>
<th>Identity Goal*</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building</td>
<td>a pursuit to establish a new family, relational, or individual identity either in structure or character.</td>
<td>Malina/mother: It [the vacation] has gotten us closer…It’s really made us a family. I think it helped to keep us as a unit…that is our, our time together, nobody else’s.</td>
</tr>
<tr>
<td>Trying out</td>
<td>a pursuit to test a new family, relational, or individual identity either in structure or character.</td>
<td>Ronda/mother: We wanted to see the culture…and see where the people live and if it was different than where we lived in Beijing, and yeah. (Mike/father: Um hum.) And also for the girls, you know, to look at the culture, to be in it, smell it, look at it, get it on you.</td>
</tr>
<tr>
<td>Transforming</td>
<td>a pursuit to alter family, relational, or individual identity either in structure or character</td>
<td>Mary/mother: It was having a chance to be in China with people who could interpret for us, with people who could tell us about their daily lives…That’s a life altering experience to know that you’re part of a whole world’s culture…we value that in our family.</td>
</tr>
<tr>
<td>Preserving</td>
<td>a pursuit to maintain family, relational, or individual identity either in structure or character</td>
<td>Lacey/mother: [The retreat was] for people that had adopted, and it was a Native American theme, so it was to educate about Native Americans and to help people that are not Native American who adopt them into their families to not forget their culture.</td>
</tr>
<tr>
<td>Re-asserting</td>
<td>a pursuit to re-establish a family, relational, or individual identity that has previously ceased either in structure or character</td>
<td>Scott/father: Beth’s off doing something. She’s off [points to Sabrina]. Now, you know, Kira’s getting to the middle-school age…they’re all going different directions…I think it was nice to have one common denominator, and that was kind of the purpose [of the vacation].</td>
</tr>
<tr>
<td>Securing Idealized</td>
<td>a pursuit to ensure either a romanticized past or future family, relational, or individual identity in either structure or character</td>
<td>Dan/father: I think [the vacation] was geared more towards getting the kids involved in skiing ‘cause we wanted them to learn how to ski. We wanted them to get excited about it because we’re [points to Kendra/mother] going to go ski, and whether they ski or not is irrelevant.</td>
</tr>
</tbody>
</table>
Summary

In the above section, I defined and gave examples of each of the nine primary identity goals from the current study: building, trying out, transforming, re-asserting, preserving, assimilating, securing idealized, legitimizing, and concluding. Although some of these goals mirror those found in the individual identity literature (i.e. preserving), other goals only surface when we look across identity groupings (i.e assimilating). Further, although the content of families’ identities could vary considerably (“we’re athletic,” “we’re adventurous,” “we value learning,” “we’re spiritual”), identifying the types of identity goals families demonstrate is a much more manageable task that could drive meaningful segmentation around what families are trying to accomplish.

Identity Interplay

Beyond this, examining the interplay of family, relational, and individual identity goals reveals that families hold multiple goals simultaneously that move across identity bundles. To illustrate, within the context of their vacation to China, the Dodge family declared family goals of trying out (Madeline/daughter: “we’re all willing to try new things and learn about different people and places”) and re-asserting (Madeline/daughter: “our lives are really busy with school and work…those [vacations] are really good opportunities, not just to see the place, but just to be with your family”); relational goals of assimilating Madeline into parents’ relational identity of world travel and adventure (Mary/mother: “I really did have a goal of Madeline being exposed to another culture in a way that was not scary and opened her up to be able to do more of that. I was very conscious of that.” [looks to Matt for confirmation—he nods in agreement]; Matt/father:
“also to have that sense of adventure—that you’ll be okay.”); and individual goals (Mary/mother: “I had some work goals”).

Concurrent goals occurred across families. To provide some framing and details, other common examples—such as building new collective identities, while preserving existing relational and individual identities—will be presented within the context of the approaches used to manage them. As previous theoretical perspectives do not account for goals that exist across identity bundles, in the next section, I examine how families manage this interplay among family, relational, and individual goals to respond to my second research question. The purpose of this section is not only to expose the range of families’ identity goals, but also to determine the range of identity-management approaches exhibited by families.

Identity-Management Consumption Approaches

Based on the numerous examples given previously to represent families’ identity goals, I conclude that families enlist marketplace resources (i.e. service providers, brands, and products) directly to accomplish their multiple and varied identity goals. Next, I will examine more specifically in what ways families use these resources by outlining five identity-management approaches: 1) prioritizing identity bundles, 2) replicating practices, 3) integrating practices, 4) building resource constellations, and 5) enlisting platform resources. These approaches place the focus squarely on the interplay of family, relational, and individual identities. Further, although I will outline each independently for the sake of clarity, families frequently engage in more than one of these approaches, even within the bounds of this single consumption context.

Prioritizing identity bundles

One approach families used to manage multiple identity goals across bundles was to prioritize certain identity bundles within the family over others, either intentionally or accidentally. Several families prioritized a few identity bundles throughout their vacation experience. For example, the Quigleys prioritized a relational identity bundle that included dad and his two adult, estranged children (Dina/mother: “wanting to get that time in with the kids that we missed out on in the last 13 years.”). The Masons prioritized the collective identity bundle over all others (Peter/father: “We don’t really go our own directions…We both work, so we think family vacations should be all of us doing things together.”). Finally, the Diggertys prioritized their son Daren’s individual identity (Tandy/mother: We kind of let Daren be in charge this time ‘cause it was a quick trip and it was kind of about him.”). The above examples each relate to structure, but families also prioritized character-related identities (“sports,” “thrill-seeking,” “valuing nature”) as well. Prioritizing certain identities over others is not without consequences—both positive and negative. I will discuss these outcomes in detail in a later section.

Given the extended service context, other families rotated among identity bundles they prioritized throughout the vacation. Tonia/mother recalls, “There were different things that people wanted to see that we made a special effort for.” Tara, a mother from a different family, echoes this point and illustrates that in families where distinct identities bundles exist (in this family, dad and the two older daughters often separate from mom and the two younger daughters), relational units may make distinct choices:
Tara/mother: the teenagers wanted a beach, and I was trying to find something that the younger two would enjoy. And [I] knew they hadn’t ever been to Disneyworld… So, [we] kind of tried two days for everybody.

This consecutive prioritizing approach may be linked to different decision-making outcomes for families, as explored in a subsequent section.

The prioritizing approach links directly to at least three of the previously mentioned identity goals. First, several examples in my data suggest that families often prioritize certain identity bundles when their goal is to preserve relational unit or individual identities, such as when the purpose of the trip is to allow a couple to maintain their own traditions or to facilitate sibling bonding in the midst of a remarriage. Second, families also gave priority to a certain identity bundle when re-asserting such an identity was a goal of their trip. For instance, given that the purpose of the Quigley family’s trip was actually to re-assert the father-children relational unit, the family prioritized this identity bundle throughout the trip. Thus, many of the consumption activities (i.e. dad’s birthday party at Applebees) the family engaged in enabled interaction among these particular members. Third, as previously discussed, vacations provide a foundation for building new identities. Families in the current study regularly prioritized a specific identity bundle during a trip to allow for this building process to occur. As a blended family, the Higgins revealed that the trip “made us a family,” and not surprisingly, the family spent nearly the entire trip together engaging in collective activities.

Replicating practices

Based on previous research, we know that family traditions are central to building, passing on, and preserving family identity (Baxter and Braithwaite 2002; Wolin, Bennett, and McAvity 1988). However, the current study reveals that families also managed the interplay among family, relational, and individual identity goals by replicating both family-of-origin and immediate family practices. Further, families did, in fact, draw on marketplace resources such as products, brands, and services as they performed these imitative practices. Preserving goals offer the most obvious and direct link to an approach of replicating practices. For instance, the Horton family preserved a collective identity of “strong faith” by replicating the following identity practice as explained by Meredith/mother: “One thing we always try to do is find a neat place to go to church that will stand out in their memory.” Similarly, a single-parent family, the Dawsons preserve a “musical” collective identity by attending Godstock—a Christian music festival—every summer.

Families also replicated practices as a means to secure idealized past and future identities. Most families in the current study indicated that creating family memories served as a primary motivation for taking vacations. An emergent finding was the commonality of family traditions created specifically within the vacation context and the value families placed on these for building continuity and securing an idealized past. When the Locke family takes a trip (camping “six to eight times a year”), they perform a few embedded traditions.
Glen/father: As a family, no matter where we go, we always get fudge. [Mom nods in agreement, and Beau/son throws his head back on the couch to indicate that he is remembering the fudge—he responds, ‘Mmm!’] (Interviewer: How did that tradition start?) Probably from going to Estes and getting fudge as a kid.

Here, a family-of-origin tradition carried over into the immediate family and offered a frame for what constituted an idealized past. Performing this tradition secured these same memories for Glen’s immediate family. In the same way, families replicated practices in order to secure their visions of an idealized future. In a conversation about everyday family activities, the Hardy-Harrison family offers a telling example:

Kendra/mother: our goal in setting up this house and setting up our life is that we want to be in a house where all their [daughter’s] friends want to come hang [out].

Dan/father: my mom had that setup with us as kids...Our house was always the house everybody hung out at... that was her way of doing it...And that’s what we’re going to do here.

Kendra/mother: And we’re going to set up swings, and I’m going to put a slide off the deck, and we’ll probably end up with a pool table eventually.

This family, and others in this study, described an envisioned family identity and performed practices that were either replicated from their family-of-origin, or in some cases, new practices they intended to replicate over time in order to secure who they want to be in the future. As a negative case, I found evidence of at least one family who did not replicate family-of-origin practices (instead this family intentionally established practices that differed from the family-of-origin) in order to secure their idealized future. This case may be explained by the extent of synergy/discord between the family-of-origin and immediate family, a possibility I will explore in a later section.

Finally, families commonly employed a replication approach to achieve assimilation goals. As participants’ descriptions of this approach differed somewhat from other replication practices, I have labeled this approach integration and explain it separately below.

Integrating members into practices

In some ways, integrating and replicating approaches mirror one another. Both involve repeat performances of central identity practices. However, in contrast to replicating practices, families only use an integrating approach when a subset of the family already participates in a defining identity practice and then invites new members to participate. Conversely, replicating practices could involve integration or they could be repeat performances involving the same family members over time (collective replication, relational replication, or individual replication).
To achieve an assimilation goal, families often replicated either family-of-origin or immediate family practices. In the vacation context, this often meant visiting destinations that relational units in the family had been to previously without the entire family. For instance, couples frequently sought to share prior experiences with their children. Jason and Tonia both grew up on the East coast and went there to visit as a couple (Jason/father: “Her [wife] and I have traveled to New York twice before this, just the two of us”). During their most recent vacation, they took their three children both to New York and Boston to visit places they remember from their childhood (“Mystic Seaport,” “Salem,” “John’s Pizzeria,” “we saw the house where I [mom] lived”). Similarly, the Navarro family took a vacation to El Salvador, so the parents—whose families were neighbors when they were children—could integrate their children into their couple experiences (Rita/mother: “different places where we grew up, you know, we want them to see”). These replicated trips served to establish continuity both across time and across the family and to mark the addition of new members to an identity bundle.

Another repeated example is illustrated by families who place importance on “trying new things” as an identity characteristic. James/father exemplifies this idea:

As a child, my dad—I mean we went everywhere...so I just kind of always wanted to do that [wife nods]—the same thing for her [wife] and my kids and give ‘em a chance to see stuff that they have never seen before.

These families replicate vacation experiences that expose members to new places and activities and expand their horizons.

Building resource constellations

In direct contrast to prioritizing identity bundles, the approach of building resource constellations allows families to address the goals of multiple identity bundles simultaneously. The concept of product constellations is not new to the marketing literature. However, other researchers have focused on complementary products that individuals might purchase (i.e. BMW and Rolex) depending on their aspirations (Alderson 1957; Holbrook and Lehmann 1981; Lowrey et al. 2001; Solomon 1988), but by examining the interplay of family, relational, and individual identity goals, the current study revealed something different about constellations.

Despite companies’ attempts to partner with other firms to offer a “complete” experience or customer solution (Tuli, Kohli, and Bharawaj 2007), families build their own constellations of brands, products, and services that best enable them to achieve their multiple and various identity goals. To illustrate, I will revisit the Hardy-Harrisons, a recently-formed blended family taking their first vacation together, and elaborate on a few of the resources that represent their constellation. To accomplish a family goal of building a collective identity, the entire family engaged in practices that involved various brands, products, and services (“Ski Cooper,” “Target,” “tradition of pancakes for breakfast,” and “hanging out in their condo”). Further, the parents described a relational goal of integrating their children into the central couple practice of skiing by enlisting Ski Cooper’s Panda Patrol ski school. Finally, Ski Cooper enabled mom to achieve her
individual goal of re-asserting her “active, adventurous” identity and enabled dad to preserve his identity marked by an “interest in history” by learning about and observing a historic reunion:

Dan/father: They [Ski Cooper] had the 10th vet division—all of the Vets from World War II that actually invaded Italy…Ted’s Mountain Division guys were skiing!... They got [out] their old camo uniforms they had in World War II.

These family-assembled constellations span across firms and product categories and may differ from those constructed by companies. Stated differently, families engage in collective, relational, and individual consumption practices all bound within the context of the vacation. As a complementary example, I have included another family’s resource constellation below as a visual depiction.

Paying attention to families’ own constellations has implications for how firms think about competitors and potential partners (which firms serve these identity goals in a complementary way?).

Enlisting platform resources

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1 The blue circles denote identity bundles, and within those I have listed the identity statements linked to each bundle. The white boxes represent the marketplace resources families enlisted to achieve various identity goals.
The final approach of enlisting platform resources also allows families to accomplish multiple goals simultaneously, without prioritizing one over others. A platform resource is one that can facilitate various identity performances due to its open or broad composition. These resources generally spark the following response: “There was a little something for everybody” (Meredith/mother). Examples from this study include a diverse range of brands, products, and services: Disney (Horton family), Godstock (Dawson family), Marriott Resort Hotel (Higgins family), Universal Studios (Samson family), Shanghai museum (Dodge family), Science Museum (Murray family), and Follenwarth Beach (Taylor family). Each of these platform resources encouraged the coming together and moving apart of families (DeVault 2000) that seems necessary for accomplishing family, relational, and individual goals within a single context. The Sampson’s exemplify how Universal Studios acted as a platform resource and demonstrate the fluid movement of families into and out of different identity groupings:

Scott/father: We intermittently, you know, we’d kind of—(Beth/daughter: Get together for this ride—) Get back, yeah.

Sabrina/daughter: Or some rides we wanted, me and her went off [points to Beth]) or grab something to eat [as a family], and then we’d split up again, or we’d look at the map, and ‘okay, we’re gonna go over here, we’ll meet back over here’…Me and her [Beth] were more into like the thrill rides, the roller coasters, and the big stuff. [Beth nods to confirm.]…

Scott/father: But it wasn’t, you know like we were apart a lot…we were always crossing paths somewhere or calling, and go meet me here [Sabrina nods].

Given the number of families who articulated this approach, it seems likely that platform resources offer a potentially universal resolution for family choice, and many vacation providers emphasize this quality in their value propositions. However, some families relied on more platform resources during the course of their vacations than others, implying that at least some differences across families exist in this regard. Based on an examination of negative cases (families who did not enlist platform resources), there are a few possible explanations for this variation. In nearly all negative cases (6 out of 8), families evidenced a great deal of identity overlap (synergy—i.e. “all love sports,” “all are thrill seekers”), and prioritized collective identity practices over others during their trips. As such, platform resources may have been viewed as unnecessary for these families. In the other negative cases (2 out of 8), families evidenced more discordant identities, but rather than enlisting platform resources, these families split into relational bundles and built more elaborate resource constellations.

In a related theme, families often participated in activities simultaneously, but with little to no interaction among identity bundles. I will borrow the term “parallel sociality” first used by the child psychologist Eleanor Maccoby (1951) because it wholly captures the behavior families described (Daly 1996). Privatized technologies (i.e. iPods, portable videogame consoles, and DVD players) frequently enabled parallel sociality:
Derrick/father: [On our flight to Africa, we were] watching movies on the plane…each of our seats had a screen on it, so you could plug in, with a choice of like 30 movies and TV shows and music.

In this study, platform resources in general and parallel sociality in particular helped families accomplish two tasks. First, they preserved character elements of collective or relational identity by allowing multiple family members to engage in the same activities (“watching movies,” “reading”), even when they were not interacting directly with one another. Second, they preserved structural elements of collective or relational identities by enabling families to remain in relatively close physical proximity, but engage in more individual or relational pursuits. As Callie/mother explains, “We don’t usually feel like we all have to do the same thing, but we’re always together when we’re doing it.”

Resource Use: Further Exploration of the Role of the Marketplace

In the previous section, I outlined the general approaches families used to manage the interplay among family, relational, and individual identity goals. However, to fully address my second research question about how families use marketplace resources as they manage identity interplay, I examined more specifically what roles families assign firms’ resources in their consumption narratives. Further, by adopting a narrative approach, I encouraged families to give details of the temporal order and context in which these marketplace resources were embedded. Focusing on families’ collective, relational and individual experiences of a specific consumption event is consistent with a shift in attention from locating value in transactions to locating value in use (Lusch and Vargo 2006). In short, families generate value for firms’ resources in how they use them to accomplish identity goals for this consumption activity, and collective consumption narratives provide a method for eliciting the roles these resources play.

After analyzing the structure of the families’ vacation narratives, I gained a more complete understanding of how families value firms’ resources in their own lives and identity practices. The narrative analysis indicated that families do assign marketplace resources including brands, products, and services roles as central characters in their consumption stories. Families also portrayed these resources as part of the setting, in some cases. However, to address my second research question most effectively, I will focus my discussion on the more active roles these resources played—frequently as part of the problem and regularly as central to the resolution (thankfully). Next, I will introduce each of the character roles families assigned to marketplace resources and elaborate on how these are linked to the interplay of families’ identity goals.

As obstacle

One of the most common ways families presented marketplace resources in their stories was as an obstacle. In this role, brands, products, and services acted as barriers to achieving families’ identity goals and typically disrupted, displaced and/or dramatically altered families’ consumption practices. Families frequently portrayed major product/service failures, poorly designed servicescapes, inadequate product/service quality, and disruptive service elements (i.e. noise, other customers, or dirty facilities) as completely derailing their plans. In some cases, families missed opportunities to perform
central identity practices because they could not gain access to or were otherwise deterred from these consumption activities. For example, the Samson family struggled to perform a tradition they engage in both on vacation and at home with a goal of preserving a specific collective identity (“we all like seafood”).

Scott/father: we kind of made—we wanted to eat good seafood. (Kira/daughter: Um hum.) So we were always—that was probably the one thing we spent the most time asking and talking to people [about]. Where is a good seafood restaurant? We talked to the concierge. (Sabrina/daughter: We hit a couple bad ones.) (Kira/daughter: Oh yeah.)

Despite the family being in Florida, where seafood is abundant, they ended up eating at a Mexican food restaurant (that happened to feature a few seafood dishes). Notice that even their hotel’s concierge steered them in the wrong direction and obstructed their ability to achieve their goal. Similar stories abound in the data:

Matt/father: We got books and stuff like that and tried to read about the place [Shanghai], but we found that it was really disjointed…If you read the tourist books, like Frommer’s and stuff like that, they were okay, but gosh, I don’t think we saw hardly any of those places…Shanghai is 27 million people—you can’t find it!...You can’t even ask a taxi driver, so there’s no way to get to those kinds of things. So, we found a lot of that stuff when we got there to be pretty useless.

Thus, the practices families envisioned to accomplish various identity goals were unavailable or difficult to reach.

Similarly, throughout their narratives, families gave examples of roles they envisioned for specific marketplace resources, but later discovered that they needed to “re-cast” the role when the brand, product, or service did not live up to the part. Families regularly voiced concerns over disappointing experiences during their vacations. Although this may seem trivial, when resources did not match envisioned expectations, I observed real consequences for families’ identity goals. Jason and Tonia intended to share their childhood experiences with their own children (assimilating and securing idealized goals) through a trip to several of their favorite places on the East Coast. However, despite his son’s positive evaluation, several marketplace resources fell short of expectations according to dad:

Jason/father: We were kind of disappointed in Salem. (Jeremy/son: Salem was cool.) When I was a kid, I remember it, and I thought, I thought it was kind of neat when I was a kid, but we just didn’t really. (Jeremy/son: It was cool.) It was kind of commercialized. It was too commercialized.

Instead, the family turned to attending baseball games and visiting other favorite childhood spots to achieve these goals.

A final widespread example of marketplace resources as obstacles to identity goals occurred when families were forced to split into different relational bundles (when they
intended to enact collective practices) or were forced to spend time as a collectivity (when they intended to enact relational or individual practices). Most often, these examples related to hotel accommodations. For a single-mother with seven adopted children of various ages, the servicescape design of most hotels often presents a serious obstacle: “A problem is conjoining rooms. They won’t guarantee they have any rooms, and they won’t let all of us stay in one room.” This family is forced to find creative accommodation solutions each time they travel, resulting in less than ideal groupings of family. Likewise, the Dodge family was forced to separate based on accommodations:

Mary/mother: then they [the hotel] had these little tiny beds…and there were three of us. So, we said, can we have another anything in the room? And they said, ‘oh no your child has to sleep with you.’ It’s like, I don’t think we can—we can’t fit. We can’t do this. I think we’ll just do another room for the night… Matt said, ‘I’ll go down there.’… In the back of it [the hotel] is this ally, and that’s where Matt’s room is. And we’re like, ‘okay, what’s (whispering) what’s happening for him down there?’

Rather than accommodating a collective experience, the servicescape design disrupted collective practices.

As hero

Although less common than the role of obstacle, families did portray brands, products, and services as heroes in their vacation narratives. To be considered a hero, marketplace resources had to overcome obstacles families faced while trying to achieve identity goals. These resources were characterized as much-needed solutions to problems presented by the marketplace. Hero resources overcame both uncontrollable obstacles (i.e. weather, illness) and controllable obstacles (i.e. crowds, wait times, difficulty locating venues). Further, some resources acted as an escape for families—from exhaustion, from unwanted experiences, and from overly aggressive service providers, for example.

Mary/mother: Remember, the rice, water (Matt/father: gruel) and the egg that had that (Madeline/daughter: pickled tofu) pickled tofu (Matt/father: stinky tofu—that’s what they call it…) So, we all knew we can’t do this…We went to Starbucks the next morning.

The Hardy-Harrison family offers another example:

Dan/father: literally the whole town of Silver Thorn was—[the] power was out…(Kendra/mother: We called the rental people, and [it] was starting to get dark, and the lights aren’t back on yet. And we started looking through the condo; there’s no candles, no flashlight…) I found a Target…where the registers were, the power was off, so they couldn’t accept money…I just looked at the lady said, ‘I’ve got three little kids sitting in a condo, pitch black. Uh, you know, help me out.’ [Kendra/mom smiles.] She just kind of went…[gestures to indicate that the Target employee waved him through without paying for the candles] She was like, ‘this happens all the time.’
As evidenced above, marketplace heroes (Starbucks and Target) offered redemption from seemingly impossible situations and allowed families to resume family, relational, or individual identity goals.

As enabler

All families in the current study described the marketplace in the role of “enabler,” as brands, products, and services made it possible for families, relational units, and individuals to perform central identity practices. As a family, the Wilsons described one of many identity goals they wanted to accomplish on their African safari: “We were interested in nature and animals” (Kayla/mother). Several marketplace resources enabled the family to enact this goal. At various points in the story, family members characterized the following as enablers of their goal: Land Rovers, game drives, the Elephant Sanctuary, and guides.

Derrick/father: And this is Sal, is that right? [Dad shows his family a picture—all members say ‘yes.’) Our Masai guide who led us on a couple walks. And we had to have escorts and guides…We would see elephants as we looked down, elephants and giraffes and hear other animals prowling around.

Without the Masai guide, the Wilson family would be unable to experience the practices that were central to achieving their identity goals. Although the role of “enabler” is a straightforward and simplistic use of the marketplace, it makes such an impact on families as they strive to achieve their identity goals and are granted access through the marketplace.

As challenger

Resources often presented welcomed challenges that families, relational units, or individuals had to overcome in order to prove and/or transform their identities. In other words, as challengers, resources pushed the boundaries of families’ identities and were often linked to identity goals of trial and transformation. Examples of challengers emerged across families and included consumption activities such as thrill rides, water skiing, parasailing, camel rides, alpine slides, public transportation, bear hunting, and local market shopping. For example, for a group of sisters (Delilah and Dana are biological sisters, and Mandy is their step-sister), a 12 foot snow slide offered opportunities to test their limits for some and explore new identity trials for others.

Dan/father: She does like a vertical drop off the side of it. [Delilah smiles as Dan talks about her.]...(Dana/stepdaughter: I was scared. I was very, very scared.) (Kendra/mother: These two were sliding [points to Delilah and Mandy]…These two are just crazy.) She is the precautious one [referring to Dana]. These two are not at all [referring to Delilah and Mandy]. (Kendra/mother: And she found a little place to slide, like partway down where she could do a half slide.)

In this example, step-siblings Delilah and Mandy take on a marketplace resource in a performance of their shared “crazy” identity, and Dana engages the marketplace as
challenger as a way to integrate herself into this sibling identity, despite her fear and individual identity of being “precautious.”

As educator-historian

Given the importance of communicative staging to enhancing consumers’ service experiences (Arnould, Price, and Tierney 1998), firms may be interested to know that families often assigned the roles of educator and/or historian to marketplace resources. Further, families expected that vacation contexts would provide learning opportunities for family members and offer factual, historical information. Some consumption activities were more commonly assigned these roles than others (i.e. art and science museums, natural historical sites, political tourist destinations, religious tourist destinations, and cultural tourist destinations). In some cases, families made learning a central family goal during their vacation (Shane/father: “[We] wanted a little bit a history on the trip”...Meredith/mother: “So, learn a little bit.”); these families also often articulated goals of trial and transformation as important. Conversely, for other families, learning during their trip was an unintentional, but positive outcome: “It’s [South Dakota] kind of one of those vacations that you learn, but you don’t realize you’re learning. Those are a good kind” (Cathy/mother).

As entertainer

Nearly all families in the current study characterized marketplace resources as entertainers at some point during their narratives. Like educators-historians, some resources were assigned this role more frequently than others (i.e. amusement parks, outdoor sports, theme restaurants, and shows). Given the frequency in which families characterized the marketplace as entertainer, I felt it was important to mention. However, as it is not all that surprising that families would turn to the marketplace for entertainment during a vacation, I will refrain from further elaboration.

As protector

In many contexts, the marketplace requires rules and regulations to ensure consumers’ safety. Thus, many families described the marketplace as a protector/enforcer. Whereas this role sometimes enabled family practices (Meredith/mother: “Disney takes care of buffets!...[If] somebody sneezed, they were in there so fast and removed everything.”), it also inhibited other family practices (Jeremy/son: “I tried to take the boogie board in it [ocean], but those lifeguards started going, ‘Get it out!’”).

As mnemonic

Although many families assigned, especially products or souvenirs, roles as mnemonic devices, this role has been discussed extensively in our literature on symbolic consumption (Belk 1991; Grayson and Martinec 2004; Grayson and Shulman 2000). To cover the full implications of this theme would be outside the scope of this study. Thus, I will limit my discussion to a few observations that link directly to my second research question (how families use firms’ resources). Beyond the basic function of helping families remember their trips, souvenir buying was the site of special traditions according to some families. As illustrated by Meredith/mother, the Hortons have a specific souvenir
tradition; “we always buy a magnet from everywhere we go.” These souvenirs provide continuity of identity across contexts and promote collective memory over time.

As architect

The final family-assigned role that emerged from this study was marketplace resources as architect. In this role, brands, products, and services are central to designing (or facilitating in the design of) family, relational, or individual experiences. As you might imagine, hotel literature, guide books, travel brochures, recommendations from locals, discount booklets, tour guides, concierge services, resort itineraries, and the internet surfaced as common examples. Each of these resources was central to helping (and sometimes hindering) families in their quests to construct meaningful identity practices and to manage multiple identity goals simultaneously. To demonstrate the importance of this role, I will review a few illuminating examples from the data. For example, the Dodge family described the Chinese government as an architect in their vacation narrative:

Mary/mother: it [our hotel] was one of the few that had been identified by the Chinese as being acceptable for tourists because they screened out most of their hotels as not being acceptable…They [the Chinese government] are really working hard to be part of a global market, but I had somebody come up to me about one of the shelters we went to see who said, ‘Thank you so much for coming. They built this shelter this month, so you could see it.’...It’s a lot about perception… We weren’t allowed to see certain things, do certain things.

In this example, the Chinese government orchestrated many of the options available to the family for enacting collective, relational, and individual identity practices.

In another example, the Quigley family informed Applebee’s restaurant that they were celebrating dad’s birthday as a family for the first time in over a decade (an example described previously). Family members clearly assigned Applebee’s to the role of architect in their story and described how the restaurant helped design a unique experience:

Dina/mother: They [Applebee’s] made it special. (Bryson/son: They made it memorable. Yeah.)...We noticed the bartender...And then pretty soon he comes over and he goes, ‘So, you’re the birthday boy.’ [mom laughs] Sits down this huge bowl of whipped cream—(Curtis/father: Whipped cream.) [After the family described a game the bartender asked dad to play that involved finding a cherry in the whipped cream, the family continued with the story.] And he [Curtis/dad] was such a trooper, he pulled off his hat, and he pulled off his glasses, and he just buried his face in there!...The mood was so awesome, you know, because there was so much laughter, so much joy.

In this example, Applebee’s was central to the plot of the family’s story and aided not only in constructing the details of the family’s birthday celebration, but also helped the family to achieve its goal to re-assert a relational identity.
Summary

In this section, I further investigated how families used marketplace resources to manage identity interplay, and specifically, I outlined the roles families assign these resources in their vacation narratives: obstacle, hero, enabler, challenger, educator-historian, entertainer, protector, mnemonic, and architect. Thus, families characterized brands, products, and services as actors in their collective narratives and as central props in their fundamental actions of relating. As evidenced by the diversity of family-assigned roles, marketplace resources allowed for the simultaneous performance of identities related to collectivities, relational units, and individuals.

Family-assigned roles differ from those traditionally presented in the literature and likely depart from how firms think of themselves. The Embassy Suites offers a useful illustration. It is a Diggerty family tradition to go to the Embassy Suites (“We usually go a couple times a year” Tandy/mother). Research on servicescape design suggests that the physical environment plays four primary roles: acts as a package for the service, differentiates it from other service environments, socializes consumers about how to act during the service experiences, and facilitates movement through the service environment (Bitner 1992). Although many of the reasons the Diggertys choose Embassy Suites relate to its unique servicescape elements (glass elevators, central atrium, open hallways, and so on) that enable both family and sibling traditions (i.e. Katie/daughter: “Get paper airplanes and go from one side to the other.”), the roles the Diggertys assigned to the Embassy Suites in their stories extend outside the scope of traditional servicescape roles and move beyond those presented in the company’s marketing communications. The company’s branding statement focuses on “space” and presents the Embassy Suites as an “upscale, all-suite hotel” (Embassy Suites 2008). However, the Diggertys present the Embassy Suites as an entertainer, hero, and enabler. As such, understanding these roles could aid firms in creating more relevant value propositions based on how families actually view firms’ resources as participants in their identity practices. More narrowly, firms should want to know, “Who are we to this family?” Does the family view us as an obstacle, a challenger, or maybe as simply part of the setting of their story? Additionally, firms should consider, “Who do we want to be to this family?” These questions related to potential shifts in marketplace roles should be helpful to firms as they re-craft value propositions.

As a final comment and potential caveat about family-assigned roles, I observed at least a few instances in my data in which family members presented conflicting perspectives about the role of a particular marketplace resource (i.e. some members characterized the resource as an obstacle, while others portrayed it as a hero). For example, when fans were booing the pitcher at a Yankee’s game, mom viewed this as an obstacle to her enjoyment of the game (“we were shocked about how rude the people at the game [were]”), whereas dad and their two sons who all identified themselves as avid baseball fans viewed this as enabling them to experience the true nature of the game (Jason/dad: “I thought it was great—(Kenton/son: yeah) because it’s typical Yankees, you know?”) This circumstance highlights the importance of gathering collective, interactive data in family research and considering the multiple perspectives that emerge. Moreover, on this point, these findings underscore the value in taking into account
synergy/discord and member (dis)agreement across identity bundles throughout the study.

Outcomes of Identity-Management Approaches

In this section, I have outlined two primary aspects of a family identity management framework: identity goals and identity-management approaches. These sections focused on the interplay of family, relational and individual identity goals and explained how families use marketplace resources as they manage this interplay. The purpose of the next two sections is twofold. First, I outline the marketing outcomes linked to families’ identity-management approaches to demonstrate the potential implications of this research. Specifically, I consider outcomes such as the displacement of families’ identity practices, aspects of loyalty, and processes of family decision-making. Second, I will address my third research question by examining several conditions that alter families’ consumption strategies as they manage family, relational, and individual identity goals.

Displacement of identity practices

In addition to practices being displaced by specific barriers to enactment (i.e. no access to the marketplace, cost, weather, health, and so on) as indicated in earlier sections, a common theme in the data was the voluntary or accidental displacement of one identity practice for another. This outcome often resulted from cases when families prioritized certain identity bundles over others (i.e. collective over relational identity practices). For example, some families used their vacations to strengthen particular relational units within the family such as stepfather-stepson relational identities, sibling identities, or couple identities. In doing so, they often voluntarily forfeited other identity practices. As previously discussed, the Quigleys centered their vacation decisions on re-asserting dad’s relationship with his estranged adult children. The family voluntarily prioritized practices related to this relational unit over other practices such as their youngest son’s desire to “find basketball shoes,” dad’s interest in going to the “civil war museum we’d heard about,” or the siblings’ (brothers) interest in “snowboarding in the Rockies” with their brother-in-law. Further, evidence that families’ priorities shift across time and circumstances is given in the Quigleys intent to emphasize different identity bundles (couple identity) during a future trip:

Dina/mother: We’ve never really taken a trip. We’ve wanted to do some things. We’ve never had a honeymoon, so we’re going to go on a cruise—(Curtis/father: cruise). The boys are staying home.

As many families used vacations to strengthen the family’s collective identity, the data also include many examples in which families voluntarily displaced relational or individual practices with collective practices. If you recall from an earlier example, in the Mason family, both parents work and believe that “family vacations should be all of us doing things together.” Thus, they prioritized collective practices throughout their trip. Further, in direct contrast to the Quigleys example, the Mason family discussed a trip to Hawaii planned for later this year that evidences the voluntary displacement of a relational (couple) practice for a collective practice: “After we were married, we went there [Hawaii]...It’s our 15th wedding anniversary, but the family is going on a vacation”
(Cathy/mother, emphasis in original). Prior research does not account for the displacement of individual, relational, and/or family identity practices by other practices. In the above examples, displacement was based on prioritizing structural aspects of identity.

Additionally, the current study offered evidence of displacement based on prioritizing certain character elements. In the example that follows, the Locke family accidentally displaces a collective practice with a more central collective practice.

Callie/mother: We had intended to go to Jocelyn [art museum], but…(Glen/father: You didn’t get past the camping store!) We did—we went to the camping store. (Glen/father: We went to Cabela’s and Campfield’s and spent the day there.) Yeah. By accident.

Camping surfaced as a defining practice not only of the collective family, but also of the father-son relational unit, and for each of the family members individually. Thus, the goal of preserving the family’s “camping” identity displaced the family’s goal of trying out a new collective identity (“art patrons”).

The displacement outcome demonstrates the necessity of investigating the interplay of identity bundles, as opposed to examining identity goals in isolation. If we were only focused on the displacement of the family’s practice to attend the Joselyn art museum, we may have concluded that the family simply abandoned the practice. However, when viewing that practice in relation to the family’s other identity practices, we have a better understanding of this outcome. Thus, by examining identity interplay, we get to see how identity practices bump up against and are consequential for one another. This line of findings has direct implications for firms with regard to families’ loyalty to specific brands, products, or services, and thus, will be discussed further in the next section.

Loyalty: identities, practices, and resources

Based on the prevalence of replicated practices and traditions grounded in families’ vacations, it is essential to include a discussion about loyalty as an outcome of this study. In addition to loyalty to particular collectivities or relational units, loyalty appeared in at least three other forms. In particular, families expressed loyalty to particular identities (“we’re athletic”), to particular performances (“we go to baseball games”), and to particular resources (“we go to Kansas City Royals baseball games”). These distinctions become important as we attempt to parcel out the conditions that support loyalty to brands, products, and services. For instance, a family may perform an “athletic” identity in countless ways. Thus, loyalty to a particular identity or even practice does not necessarily translate directly into loyalty for a particular resource.

Further, the data reveal that families enlist the same resource to support different identity bundles: collective, relational, individual, some combination of these, all of these, or none of these. This seems to have implications for brand/product/service loyalty as well. As I observed earlier with the Locke family for whom camping was central to collective, relational, and individual identities, a trip to Cabela’s for camping supplies
displaced other practices. Accordingly, resources that span across identity bundles may have the potential to place conditions on the expression of other identity practices (that may involve other resources) and to gain longer-term loyalties.

To this point, the Hardy-Harrison family expressed loyalty to skiing and claimed that this practice was central to the family, the parents as a couple, the siblings, and to mom and dad as individuals (both skied with their families of origin as well). Consequently, they envision skiing as a part of their idealized future as a family: “The next time we go skiing, we are going to have a lot, and I mean a lot of fun! [standing and shouting]” (Delilah/daughter). The family already has several ski trips planned for the coming year, but based on their stories, it appears that they are not loyal to a particular ski resort. Thus, if a resort or brand were to become central to this family, there seems to be a great deal of potential for long-term loyalty.

Another potential source of loyalty to specific resources occurred when brands, products, or services were embedded in everyday practices. Despite families’ acknowledgement that vacations represent a break from normal life and routines, I observed a somewhat surprising amount of overlap between everyday and vacation practices. Many everyday identity practices carried over to the vacation context (often in line with preserving goals). For instance, when asked if the family had any vacation traditions, the Quigley family responded as follows:

(Karston/son: [We go] out to eat.) (Dina/mother: Um hum. [dad nods his head to the side and raises his eyebrows, as if saying ‘good point’]) (Bryson/son: At Perkins.) (Karston/son: That’s pretty much all we do.) (Bryson/son: Yeah. Perkins is really, really good, especially their Belgian waffles.) (I: So is Perkins something that you seek out when you go?) (Karston/son: Sometimes. Like I have basketball games…and we just go to Perkins and get like pancakes and stuff after the games. [Dad nods to confirm.]) (Interviewer: So did you go to Perkins in Colorado?) (Bryson/son: Yeah.) (Dina/mother: Actually, we did.)

As a resource, Perkins is linked to both everyday family practices and to vacation family practices. Furthermore, families offered numerous examples of how resources enlisted on the family’s vacation became embedded in everyday identity practices once the family returned home. For example, based on this data, Disney seems to lead the brand world in finding ways to integrate vacation experiences into everyday identity practices. Since returning from their trip to Disney, Shane/father describes his daughter Hilary, the youngest (age 4) of three kids in the Horton family, as having “gone princess crazy!” He continues to explain:

Shane/father: She just absolutely—everything [is] about princesses. She’s got [a] princess clock and a princess TV in her room, don’t you? (Hilary/daughter: [laughs] Yes!) Yeah, she watches [Sleeping Beauty] pretty much every day…You’ve also had the, the princesses call since we got back…[On the] Disney Princess website, they have this thing here where you can actually get a call from a princess…(Meredith/mother: Hilary wears her sweatshirt every day.)
Although Hilary has the largest collection of Disney memorabilia, all of the kids brought back Disney souvenirs, and Disney princess calls are a favorite of both daughters. Understanding what accounts for this type of carry over is important for firms as they attempt to build long-term loyalty.

As a result of these findings, this study suggests that in addition to examining consumers’ attitudes and emotional ties to firms’ offerings, firms need to consider whether and how their resources are embedded across identity practices and bundles. Stated differently, to which practices and to which identity bundles is my brand, product, or service central? Perhaps even more important, how can I link my brand, product, or service to other identity practices and bundles?

Decision-making and identity interplay

Although some family decisions reflected traditional notions of family members taking on different roles in the decision-making process, much of the data resembled a process closer to Park’s (1982) description of spousal decision-making as muddling through. Families frequently expressed a general agenda (Matt/father: “we’d go off to do the thing for the day”), noting a few specific places they wanted to make sure to visit during their trip and articulating an intent to orient the trip around a particular identity bundle (“we want to spend time together as a family,” “this trip is really for the kids,” “it was a girls’ [mother/daughter] trip”). In general, families’ identity goals appeared to shape their decision-making while on vacation. However, the extent to which families’ identity-management approaches were planned, intentional efforts as opposed to more spontaneous choices of resources available to meet their needs varied across families. In fact, families often characterized decision making in the following way: “spur of the moment,” “a constant juggling act,” “if it works out, it works out—if not, we’ll find something different,” “there was not an agenda,” “we didn’t have a set schedule,” “we kind of just take off and go,” “we just kind of fell into it,” “we don’t plan,” “we just do it,” “fly by the seat of our pants,” or “everything is up in the air.”

This is not to say that families do not plan at all. However, even the most planned families expressed the need to be flexible. For example, the Navarro family typically spends six months planning a trip, but Rita/mother acknowledged the need to adapt: “we know that things are not going to be, you know, exactly step-by-step how it was planned.” This flexible attitude also surfaced as families characterized the marketplace as an obstacle to achieving their identity goals. In some cases, families planned to enlist specific resources to manage identity goals, but were forced to switch resources due to barriers presented by the marketplace. For example, the Horton family planned to go to a Red Sox baseball game while in Boston, but when the found out that the Red Socks were out of town and the stadium tours were unavailable because there was a concert by The Police there that night, they reshuffled their resources. Instead, they attended a Yankees baseball game in New York City as a family, and mom and dad took turns going to The Police concert. According to Jason/father, this was a positive turn of events, “That was my highlight—yeah, getting to see The Police at Fenway.”
Despite this broad categorization of families as quite adaptable, the over-arching goals expressed by families and the identity-management approaches they selected did seem to offer some direction to families in the midst of their decision-making processes. For example, decision-making frequently revolved around the goals of multiple identity bundles within the family, with families building in time to be together as a family, couple time, activities for siblings, and even time to be alone. This notion extends upon initial ideas of decision-making as a muddling through process (Park 1982) by accounting for identity bundles that overlap and depart throughout the experience. In some cases, while on vacation, families would build a plan for how the family would come together and move apart throughout the following day. Further, decision-making seemed to shift depending upon whether and how families prioritized identity bundles in this context. As previously mentioned, some families prioritized one identity bundle, which often resulted in resources being shifted primarily to that bundle during decision-making (i.e. resource constellations built nearly entirely around one relational unit). Conversely, other families prioritized multiple bundles or alternated which bundles were important at certain points, which resulted in a more even distribution of resources across bundles during decision-making (i.e. resource constellations built around multiple bundles). I further disentangle the complexities of how managing this interplay of identity goals directs decision-making processes in my subsequent discussion of synergy and discord.

The “muddling through” nature of decision-making that surfaced in the current study highlights the importance of the marketplace’s role as architect. As many families condoned more flexible, just-in-time decision-making, they relied on immediately available sources of information (i.e. hotel brochures, concierge services, resort itineraries, referrals from others, and online information) to make choices about which resources served their identity goals. Thus, these findings also underscore the importance to firms of understanding which identity goals their brands, products, or services are most suited to address (and define themselves within a constellation of potential competitors/partners families will turn to in the moment). It seems that service providers could take much more active roles in family decision-making, and given the extent to which families sought immediate advice through the marketplace and outsourced decision-making responsibilities to providers, it seems families would also be accepting of the help.

Potentially Altering Conditions: A Case for Analysis across Identity Bundles

In this section, I will address my third research question directly by examining three conditions under which families alter their consumption strategies as they manage the interplay among family, relational, and individual identity goals: member agreement, commitment to specific identity performances, and synergy/discord among identity bundles. Again, the objective of this section is not to categorize families according to these conditions and compare how they differ, but rather to examine the range of influences these conditions may have over the process of identity management.

Member (dis)agreement

As expected, families varied in the degree of agreement across family members about collective and relational identities with regard to both structure and character.
Although a majority of the families in my study demonstrated agreement on “who” constituted the members of their families, there were a few exceptions that offer interesting negative cases for understanding the boundaries of the identity-management framework I have outlined.

For the Tanner family, who got divorced a year and a half ago just following a trip mom and the two boys (ages 10 and 7 at the time of the interview) took to Disneyland, there still exists multiple definitions of family.

Leslie/mother: Mostly, it [our vacation] was just about doing stuff as a family. You know? All the activities we did.

Clay/son: Yeah. Um, three fourths of the family? [looks to mom as he asks the question] Because this part of the family technically makes up three fourths. (Leslie/mother: Yeah.) One fourth [points to mom], two fourths [points to Dylan], three fourths [points to himself]

Leslie/mother: Um hum. But your dad wasn’t really involved in the family, so.

Clay/son: Yeah, he wasn’t involved and . . .

Leslie/mother: It’s mainly us anyway, huh?

Dylan/son: Two fourths [points to himself and smiles]

Clay/son: Yeah. Well, me and him [points to Dylan] are involved in both of the family parts…Adam [mom’s boyfriend who lives with the family] isn’t much of it, but. (Leslie/mother: Isn’t what?) Um, like part of the family.

Leslie/mother: He’s part of the family.

As illustrated by this quotation, Leslie and her son Clay disagree about who to include as members of their family. With regard to their vacation, the boys’ father did not participate in the trip, and many of the consumption choices they made involved preserving the identity of mom, Clay, and Dylan and trying out this new collectivity. The structural aspect of family identity for the Tanners is in flux, as the boys participate in activities separately with their father when they are at his house and have since taken trips with mom and her boyfriend Adam. Therefore, member agreement both affects and is affected by consumption choices (recall the Higgins family: “It’s [our vacation] really made us a family” Malina/mother.)

Member agreement also was related to the character elements of family identity. For instance, although all family members agree that camping defines who they are as a family, family members disagree about the contents of the actual performance of camping. What constitutes camping and how the family should engage in this central activity is up for debate. In this case, Callie and Glen’s camping experiences with their
families-of-origin shaped the way they think about this practice. Although Glen’s family camped in either cabins or tents, Callie’s family camped differently:

Callie/mother: But when I grew up, my folks had a travel trailer. So, we always camped, but it was, you know, a trailer with a shower and TV and air conditioning. That was my idea of camping. Um, and I was an only child, as Beau. [Taps and shakes Beau’s knee.] And, um, we’d get up really early in the morning before the sun would come up, but we always ate all our meals in the travel trailer.

Thus, what mom envisions as an ideal camping experience differs dramatically from what Glen and Beau imagine. In this example of member disagreement, the family alters consumption practices to accommodate the multiple perceptions of ideal camping:

Callie/mother: we have an agreement—for every day we camp that we also stay in a motel. [Glen and Beau nod in agreement]

Glen/father: there have been times when we’ve gone canoeing where I’ve taken Callie back into Valentine for, um, prime rib, a hot shower and a Jacuzzi.

By altering their consumption practices slightly, the family preserves its collective identity as a family who camps, while making modifications in order to incorporate all members into this character description.

Commitment to specific identity practices

As previously mentioned, commitment often leads to loyalty, but not always. Certain circumstances, such as commitment to an identity, but not to a particular resource can result in substituting other resources to achieve similar ends. In order to prevent repetition from the section on loyalty outcomes (in which commitments to identity practices were evidenced), I will limit my discussion to a few points about the interplay of commitments among families’ identity bundles.

When all family members demonstrate ongoing commitment to a particular identity practice, it frequently becomes an integral part of how they “do” family and can take on qualities of inertia (“we always” and “we intend to always”). Under these conditions, the family does not go through the traditional process of decision-making because the practice emerges naturally and requires little discussion or planning.

Tandy/mother: the other thing we like to do a lot is go to Embassy Suites in Lincoln, don’t we? [looks to the kids; Katie nods yes] (Paxton/son: Yeah.) Yeah, we love to do that. It’s a short trip, but we love to go to the Embassy Suites. And we’ve gotten very good at getting one room… If we have nothing going on over the weekend, you know, and Todd [husband] and I’ll be like, ‘we ought to just go to the Embassy.’ (David/son: Yeah, I remember last year it was perfect… [hometown] just lost power everywhere. [Throws his hands in the air as if doing a cheer; all laugh] And we’re all like, ‘we’re going to Embassy Suites!’
The family has all kinds of traditions (“paper airplanes,” “swimming,” “play fighting in the glass elevators”) associated with this place that are facilitated by its unique servicescape elements. These traditions further embed the Embassy Suites into the Diggertys central practices of performing family. In turn, these practices preserve the family’s identity bundles over time and reinforce collective perceptions of ‘who we are’ as a family.

As with families’ special possessions that require the attention of a kinkeeper to ensure they stay in the family (Curasi, Price, and Arnould 2004), practices that lack at least one champion in the family may risk being displaced by other central practices: “It used to be our vacations were to Comstock...we love country music...[but] it just came up that other things were more important” (Dina/mother). As no one in the family advocated for continuing to attend Comstock, the family did not hold onto this practice as central to performing their “love of country music” identity. Not only a lack of commitment to this particular practice, but commitments to other identity practices across bundles can help explain why some practices last, while others do not.

Synergy/discord among identity bundles
Synergy/discord refers to “whether and how individual family members’ identities are consistent with the family’s collective or relational identities” (Epp and Price 2008, p. 15; Epp and Arnould 2006; Stone 1988). The families in this study expose diverse ways that synergy and discord among family, relational, and individual identity bundles alter the identity-management process.

Not surprisingly, synergy among identity bundles led different bundles to make similar choices across contexts. For instance, in contrast to families who feel they must choose kid-friendly activities, synergy across identity bundles in the Dodge family (“we’re all willing to try new things and learn about different people and places”) resulted in similar consumption choices as a family, a couple, and as individuals.

Mary/mother: When I think about family vacations, I really am not so hesitant to take Madeline into something that’s not just all child-oriented. I mean, she’s a bright young woman [looks at Madeline as she speaks about her] that asks wonderful questions and comes back with all kinds of different perspectives.

As further verification, the family engaged in the same activity repeatedly and in various groupings throughout the vacation: as a family (Mary/mother: “we had all these experiences the next morning because then we walked out onto this incredible true farmers’ market, community market”); as a couple (Mary/mother: “And so Matt and I would get up and we’d see what’s new in the market”); and as individuals (Madeline/daughter: “I liked going to different markets”).

Although it seems reasonable that discordant identities would result in the displacement of certain identity practices (as families made choices about which practices to prioritize), families gave examples of both synergy and discord that resulted in displacement of identity practices. When there was synergy among family, relational, and
individual identities, practices that defined identities across bundles frequently displaced other, less central practices. You may recall the example of the Locke family, in which shopping for camping supplies displaced a trip to the Joselyn art museum. Synergy also placed some unanticipated limitations on the performance of collective identities. Sports are central to the Mason family. They often attend college and professional sporting events as a family; all family members are big sports fans; and the kids are heavily involved in multiple sports. Further, the Mason family believes that vacations are about “all of us doing things together,” and as expected, throughout most of their vacation, they prioritized the collective identity bundle. What captured my attention were the few exceptions to this rule. Under what conditions did the Masons not give the collectivity priority over other bundles? In one example, the family abandoned its plans to take a vacation in June (and instead went late in the summer) “because of all the kids’ games” (Peter/father). This delay of their trip, while a simplistic example, suggests that the family displaced (temporarily) a collective identity practice for individual identity practices (“baseball” and “softball” games) that complemented the family’s overall “sports-oriented” identity. Another example revealed the same overarching explanation. Below, the family discussed an activity that included all family members except Cathy/mother:

   Bob/son: We went [rock climbing], but mom stayed down to call [a friend] to listen to—she wanted to get the score of the baseball game.

   Interviewer: So you and Addison [sister] and dad went rock climbing?
   Bob/son: Uh huh.

   Cathy/mother: They climbed up, and I took a picture. And then I watched while you tried to get down (laughs).

   Addison/daughter: It took us 20 minutes to get down.

   Cathy/mother: Yeah. It took a long time.

   In this case, mom was not required to participate in the group rock climbing activity with the rest of her family because she was checking sports scores—again, a practice that is complementary to the family’s identity.

   In addition to placing limitations on collective performances, synergy among family, relational, and individual goals also allowed family members to engage in identity trial with encouragement from the rest of the family. While in China, Matt and Mary, parents in the Dodge family (“adventurous,” “willing to try new things”), encouraged their daughter Madeline to explore the city:

   Mary/mother: As soon as Madeline figured out that she could count on the taxi drivers taking her back to her friends...all of a sudden, she was relaxed and she was having fun.
This is in direct contrast to the Navarro family I discussed previously, whose daughter Genoveva wanted to overcome her fear of heights and ride the most extreme thrill rides at Worlds of Fun, but claimed she was not supported by her father because of his own fear of roller coasters.

Within the same family, both synergy and discord exist to some extent, as bundles may overlap on one identity characteristic (“camping”) and not on another (“love of history”). However, overall, some families’ identity bundles overlap more than others on a consistent basis. Accordingly, some families showed evidence of strongly-held, distinct identity bundles.

James/father: She has her kids twice during the week; I just have my kids every other weekend. So those two nights, it’s, it’s kind of like them and me. [as he says “them,” he waves his arm in mom and Chad’s direction to indicate he means mom and her two children together and dad as an outsider; dad half laughs] And, and the rare times that I have my kids and she doesn’t have hers, she’s kind of the same way. (Malina/mother: Yeah. They kind of like to do their own thing… these two [nods toward dad and his son Philip] watch sports together and it’s like I’m gone.)

The distinct bundles in the above example engaged in separate activities to preserve the relational unit, while excluding other members.

Discord across identity bundles, in which there is little overlap among family, relational, and individual identities, altered many different outcomes in this study. First, when families prioritized one identity bundle over others and identities were discordant, the result often was displacement of other bundles’ identity practices (Shane/father: “Actually, that [going to the Reagan Library] was daddy’s vacation. Everybody else wanted to go to Disney”). Second, when families sought to accomplish multiple goals simultaneously and identities were discordant, they often built more elaborate constellations (leveraging brands, products, and services that would work together to aid them in achieving these multiple goals) or enlisted platform resources. Platform resources allowed family members to engage in multiple forms of participation (i.e. at the museum, all can split up and explore their own interests; watching while others participate). Third, to resolve discord, families often broke into relational bundles for a portion of the vacation (evidenced partly in the examples I gave previously of families coming together and moving apart). Finally, in some cases, even in spite of discordant identities, family members would try a particular practice, but evaluate it differently than the rest of the family.

Summary

In this section, I addressed each of my three research questions by introducing a family identity-management framework. Using this framework, I outlined families’ identity goals, explained families’ approaches to managing multiple identity goals, identified consumption-related outcomes, and delineated conditions that altered aspects of this identity-management process. In the next section, I will clearly delineate my
theoretical, methodological, and managerial contributions; outline the limitations of the current study; and discuss potential future research that surfaced in the data.

**DISCUSSION**

Chapter five details the theoretical and managerial contributions of my framework of identity management to existing consumer research in the following conceptual domains: identity studies, service-dominant logic (value), loyalty, and family decision-making. My second objective in chapter five is to outline the methodological contributions made by the study. Specifically, I explain how the collective narrative method offers a new way to study collective constructs that moves beyond existing methods. Following this discussion, I will outline the limitations of the present study and conclude by outlining a research agenda for studies of identity interplay.

**Theoretical Implications for the Study of Identity Interplay: The Big Picture**

The primary contribution of this study is a framework of identity management. In this framework, identity interplay represents the core phenomenon, as families continuously manage individual, relational, and collective identities that overlap and collide. Much of the data from the present study moves beyond the individual, and instead, uncovers how families both transform and preserve relational and collective identities within the family. As such, my findings foreground relationships, rather than individuals.

A common theme running through my data is that people are seeking relationships with one another, not with companies. Firms spend much time and countless dollars trying to figure out how to build long-term relationships with individual consumers (based on attitudes, emotions, and enticements, for example) when, based on my findings, firms should be thinking about how to be relevant, or better still central, to consumers’ relationships with one another. Within families, there is a set of relationships happening (collective, siblings, couples, parent-child, and so on), and many choices families make relate to what is taking place in these relationships. Firms cannot possibly understand how to be central to families without understanding what they are trying to accomplish in their relationships (i.e. building new, carving out existing, dreaming of possible families and securing those, and so on). Based on my framework of identity management, identity goals shape the way we value resources, which in turn directs the resources we assemble (constellations) to accomplish these relational goals. Often, we need marketplace resources to play supporting roles in our relationships (as enabler, challenger, architect, hero, etc.). As such, resources are central to customers’ relationships with each other. They connect us, challenge us, inspire us, preserve us and sometimes get in the way of us. Unfortunately, firms often are disconnected from or unaware of the roles in which they have been cast.

 Scholars of marketing and consumer behavior also frequently focus on dyadic relationships between individual consumers and companies. Specifically, in the domains of identity, decision-making, and loyalty research, our theories, methods, and focal variables are focused primarily on individuals. Next, I will outline the theoretical contributions my framework of identity management offers to these domains. As the
framework emerged from attention to relational and collective units within the family, rather than solely to individuals, it offers a different lens for examining these core marketing concepts.

Identity Studies

Although my findings offer extensions and implications to several domains of consumer research, my primary contributions are to studies of consumer identity. My framework of identity management departs from traditional theoretical perspectives that explain identity interplay in several important ways. First, this framework examines tensions across identity bundles (family, relational, and individual) rather than within individuals as is typical of most consumer research. Specifically, much consumer research that investigates identity interplay draws on theories of social identity or identification. These theories focus on how individuals identify (or do not identify) with various groups such as social/reference groups (Berger and Heath 2007; Kleine and Baker 2004; White and Dahl 2007), organizations (Bhattacharya and Elsbach 2002; Bhattacharya and Sen 2003; Reed, Aquino, and Levy 2007; Stahl 1964), brand communities (Muñiz and Schau 2005), subcultures (Kates 2002; Schouten and McAlester 1995), microcultures (Thompson and Troester 2002), and others. However, neither social identity theory nor theories of identification provide a framework for understanding identity interplay at the relational or collective level. My framework specifically explains how families manage the interplay of collective (family), relational (couple, sibling, parent-child), and individual identities. Only by getting outside of theories of social identity or identification (and their related assumptions) can we re-focus identity research on collective and relational constructs. My framework offers a starting point for such work.

Second, the present study uncovers a range of families’ co-constructed identity goals that advance identity research. As family identity represents a relatively new construct for consumer research, this is the first piece of research, to my knowledge, that examines families’ identity goals. Although the content of families’ identities is relatively idiosyncratic and likely differs dramatically across families, it may prove useful to think about families in terms of what they are trying to accomplish. My findings reveal nine primary identity goals that move across family structures. Thus, firms could use families’ identity goals as a more effective and manageable segmentation strategy, over current models of segmentation based on lifestyle or family-life-cycle stage. Segmentation strategies based on family structure (i.e. vacation packages for single-parent families) will likely break down over the long term as we see an increase in the diversity of family forms.

Further, little consumer research investigates goals as truly collective enterprises. It is possible that the lack of research investigating co-constructed goals results from the difficulty of studying collective constructs. Bagozzi and his colleagues (Bagozzi 2000; Bagozzi and Dholakia 2006; Paulssen and Bagozzi 2006) examine social aspects of consumer behavior and focus on group action. Specifically, based on aspects of social identity theory, Bagozzi and Dholakia (2006) examine social intentions, labeled “we-intentions,” to extend the theory of planned behavior. However, “we-intentions” assume a
psychological perspective that characterizes intentions as cognitive constructs housed in the minds of individuals. Bagozzi (2000) acknowledges this as a potential limitation when reviewing the perspectives of various philosophers who theorize about group action, but does not move past this in either his measurement or conceptualizations:

“One might ask whether a more social approach to group action is possible than the frameworks posited by Gilbert [1992], Tuomela [1995], Searle [1990], Bratman [1999], and Velleman [1997]. All these frameworks rest on individual intensions of sorts. For Tuomela, Gilbert, and Velleman, it is an individual intention that one acts to do one’s part of a group action. For Searle and Bratman, it is the individual intention that we act jointly in some way. But is it possible to investigate group action where actions of members entail intentional acting by a collectivity? Baier (1997) hints that it is, but it is beyond the scope of this article to address this difficult issue” (p. 393).

Conversely, my study allows for goals that are discursively co-constituted. In other words, using a collective narrative method that examines family interaction, my study moves goals outside the minds of individuals and instead views goals as communicatively constructed. As a departure from Bagozzi’s (2000) “we” intentions [meaning “my intention for us”], I shift the focus to co-constructed goals [meaning “our intentions”]. Collective goals emerge in conversation among family members that may differ from what any of the individual members may have intended for the family in isolation, just as the collaborative telling of their story differs from what we would see if we simply joined the individuals’ versions of the story together. New aspects of the story surface in the group telling, just as new collective goals surface in interaction. Finally, not only does my study examine co-constructed goals, but it highlights the interplay of goals across identity groupings (rather than limiting analysis to intra-individual goals or individual goals for group action). One advantage of studying this interplay is a general framework for how families manage overlapping and distinct identity bundles.

A third way that my framework of identity management departs from traditional theoretical perspectives is with regard to specific strategies for managing identity tensions. By looking across identity bundles, my framework extends research on managing multiple identities through consumption practices (c.f. Ahuvia 2005; Murray 2002; Oswald 1999; Thompson and Hirschman 1995; Thompson and Tambyah 1999; Tian and Belk 2005). Previous work uncovers individual consumers’ strategies for managing identity tensions such as demarcating, compromising, or synthesizing identities (Ahuvia 2005), affirming the desired identity through choice of products or display of objects (Tian and Belk 2005; Thompson and Tambyah 1999), and switching between identities (Oswald 1999). The approaches identified in the current study advance work on identity interplay by moving beyond strategies used by individuals. I have labeled these as identity-management “approaches” to encompass both strategic and spontaneous actions of families. Each of the identity-management approaches outlined in my framework explains how families manage identity tensions and synergies across conceptual groupings (family, relational, and individual). For instance, families may prioritize a relational identity bundle over the collectivity, or build a constellation of brands, products, and services that supports each simultaneously. As such, this study both
verifies and extends how consumers accidentally and strategically enlist marketplace resources to manage the interplay of identity goals.

The final contribution of my framework to identity studies is the section on intervening conditions: member (dis)agreement, commitment, and synergy/discord. Each of these conditions directly addresses questions of identity interplay that do not appear in existing consumer identity research. These conditions explain why families might choose different identity-management approaches. Further, the level of member agreement, commitment to specific identity practices, and synergy/discord among identity bundles also have different implications for marketing outcomes (i.e. loyalty, decision-making) that will be discussed in the next few sections more specifically.

As my identity-management framework shifts the focus of identity research to examining the interplay among family, relational, and individual goals, it offers implications for at least three areas of marketing: value, loyalty, and decision-making. In the subsequent sections of this chapter, I outline the theoretical and managerial implications of my framework to each respectively.

Service Dominant Logic: Value-in-Use

In line with the emerging service-dominant logic, my study embraces the return to value creation based on “value-in-use,” as opposed to “value-in-exchange” (Vargo and Lusch 2004). In this view, firms do not deliver value, but instead co-create value with consumers. My findings emphasize that families generate value for firms’ resources in how they use them to accomplish identity goals. Thus, by studying families’ identity goals and consumption narratives, I assessed how families value firms’ resources by examining how they present those resources in their stories (i.e. as obstacle, hero, challenger, and so on). The narrative construction allows families to frame how resources fit into their lives and enable what they are trying to accomplish. Family-assigned roles may differ from how firms think of themselves. Based on these roles, managers and service providers can alter existing value propositions to incorporate and adjust for how families actually draw on firms’ resources.

While striving to accomplish multiple identity goals (such as a building a new family identity, preserving an “adventurous” couple identity, and trying out an “artistic” individual identity), families assign the marketplace various roles. As families seek to fulfill these roles, they often build their own (family-assembled) constellations of brands, products and services that best work together to meet their needs. In a business-to-business context, Tuli, Kohli and Bharadwaj (2007) found that organizational customers and suppliers held different conceptions of customer solutions. As such, it is reasonable to conclude that family-assembled resource constellations likely differ from the customer solutions or value networks firms might assemble.

Although consumer researchers’ interest in constellations spans decades (Alderson 1957; Englis and Solomon 1996; Holbrook and Lehmann 1981; Levy 1964; Lowry et al. 2001; Solomon and Assael 1987), relatively little research actually appears in this area. Moreover, many of these studies adopt theories of social identity or social categorization
to explain why individual consumers might choose a specific constellation of products, brands, or consumption activities that match a particular lifestyle category or aspirational reference group. (Englis and Solomon 1995; Lowrey et al. 2001). As a departure point for my study, my findings suggest that families build constellations not only to match a particular lifestyle category for individuals, but also to accomplish multiple identity goals in ways that satisfy different relational bundles within the family. As the vacation context focuses on an extended service experience, it involves a collection of service encounters with different providers such as destinations (theme parks, museums, national parks), travel (airlines, trains, taxis), accommodations (hotels, cabins, resorts), and souvenirs. Families create assortments of these providers depending upon families’ various goals in this context.

In recent elucidations of the S-D logic, Vargo and Lusch (2008) clarify that value creation involves the integration of resources at various levels within and between systems. Related to the current study, when families build constellations of brands, products, and services, they act as resource integrators! These constellations are of direct managerial relevance, as they define new sets of logical partnerships for firms that serve these same goals? which resources can be substituted for others?). The intervening conditions proposed by my framework including member (dis)agreement, commitment, and synergy/discord among identity bundles offer much to this body of work. For instance, relational bundles may demonstrate various commitments to resources. As a result, a couple’s commitment to Marriott might compete with siblings’ commitment to the Disney Resort Hotel. These various commitments direct how families think about the relative substitution of resources in their constellation, for example.

Loyalty

Attachment to particular brands, objects, or services has been traditionally attributed to ways that these are connected to the self (Chaplin and John 2005; Fournier 1998; Kleine and Baker 2004). In general, research on customer loyalty is dyadic in nature, focused on relationships between companies and individual consumers, and its previous iterations have centered variously on obtaining a share of consumers’ minds, wallet, and more recently heart. For instance, much attention has been given to emotional branding because of its claimed ability to build strong affective bonds with consumers based on storied, relational, and passionate appeals that surpass the effectiveness of rational or benefits-based appeals (Gobe 2001; Roberts 2004). Grounded in his analysis of some of the world’s strongest brands, Keller (2000) argues that brand managers must be aware of consumers’ core associations with their brands in order to understand what they means to consumers.

My findings suggest the importance of looking beyond individual consumers’ attachments and associations. Specifically, I extend loyalty research in at least three ways. First, by suggesting that associations to brands, products, and services are linked to families’ identity performances (value-in-use), I shift the focus from individual associations to thinking about how brands are inserted into family relationships to help families accomplish their goals. In other words, how resources contribute to families’
identity goals may drive loyalty. In the present study, resources were central to integrating members into family practices, embedded in replicated practices or traditions, re-allocated based on shifting identity priorities, enlisted as platforms, and deployed to build constellations. It follows that associations linked to these resources would flow from how families use them.

Second, by exposing that resources can be embedded across practices and across identity bundles, my findings change the way we think about associations. Rather than considering individual attachment to brands, product, and services, families’ identity bundles each act as a touch point for companies. Especially when considering the multiple identity bundles that comprise a family, this has not been previously explored in attachment research. For example, when camping is central to family, couple, father-son, and individual identity practices, a resource like Cabela’s (that offers “outdoor clothing and gear”) generates associations based on each of these bundles. Thus, as opposed to share of mind, wallet, or heart, this study underscores the value of share of practices.

Third and finally, examining the interplay of identity goals that reach across family, relational, and individual identity practices reveals how the resources that are linked to these practices become consequential for one another in terms of loyalty. My findings explain the conditions under which one identity practice can be displaced voluntarily or accidentally by another practice, and this explanation is grounded in ideas of synergy/discord among families’ identities and various commitments of identity bundles. Previous research focuses more narrowly on why consumers discontinue use of a service provider (Antón, Camarero, and Carrero 2007; Shah and Schaefer 2005) or switch to another brand (Sun, Neslin, and Srinivasan 2003; Zauber 2003), without considering how this provider or brand fit into consumers’ resource constellations. My findings support the argument that resources embedded across identity practices and bundles (family, relational, and individual) can displace other resources that may be less central to families’ identities.

Family decision-making

Previous research on family decision-making overwhelmingly focus on individual attempts to influence decision outcomes (Aribarg, Arora, and Bodur 2002; Belch et al. 1985; Corfman and Lehmann 1987; Cotte and Wood 2004; Filiatrault and Ritchie 1980; Moore et al. 2002; Palan and Wilkes 1997; Qualls 1982), with a few studies that examine concern for other family members in decision making (Aaker and Lee 2001; Hamilton and Biehal 2005). Further, these studies are absent concerns for identity, despite evidence that we continually construct and reflect our identities in consumption choices (Belk 1988; Schouten 1991). My framework of identity management offers two primary contributions to studies of family decision making. First, my framework links family decisions to identity work. More narrowly, it examines co-constructed collective and relational identity goals as opposed to individual goals that are socially motivated. Second, it moves beyond the individual as the unit of analysis to examine how the interplay of collective, relational, and individual identities directs family decisions.
Not only has family decision-making research in general directed attention narrowly to relative influence strategies, but research in the family vacation context has also limited discussions of decision-making to how and under what conditions individuals influence decisions (Filiatrault and Ritchie 1980; Litvin, Xu, and Kang 2004; Su et al. 2003). A few studies have broken decision units down to account for collectives (all family members, couple, children) to help explain decision-making, but even these studies return to individual variables to examine relative influence and decision outcomes (Filiatrault and Ritchie 1980; Nanda, Hu, and Bai 2006). In contrast, my study moves to collective a relational levels of analysis and incorporates identity goals and practices linked to family and relational units. By doing so, I offer a new approach for understanding collective decision-making that moves beyond maximizing individual utility and instead, considers how families decision reflect their use of the marketplace to produce and perform family relationships. Thus, my findings confirm my previously stated argument that consumption decisions are not about what to purchase, but how to produce relational identities.

As my research demonstrates, families manage bundles of identities that shape their decisions. In order to disentangle the complexity of this identity-management process, my framework recognizes synergy/discord and assorted commitments among identity bundles to help explain why families make choices that might not otherwise make sense. Although we rarely examine when and how collective goals (i.e. being a family—Curasi et al 2004b; DeVault 2000; Miller 1998)) take precedent over granting influence to individual family members, based on my findings, it is clear that the purpose of some consumption activities is to achieve relational and collective goals. Under these conditions, firms would benefit from thinking more strategically about how to facilitate relational and collective practices (i.e. offer platform resources, consider partnerships with firms that complement your resources, and so on) and less about who to target based on relative influence.

**Methodological Implications for the Study of Collective/Relational Constructs**

My study is the first to use a collective narrative method for theory building in consumer research, despite that it is a useful method for unraveling the complexity of collective practices. Other researchers do recognize the value of narrative as a method for understanding consumers’ experiences (Ahuvia 2005; Escalas and Bettman 2000; Kleine et al. 1995). However, these studies examine individuals’ consumption stories, but do not take advantage of the potential for investigating relational or collective accounts. The primary contribution of this method is its capacity to produce relational and collective data to make collective constructs more accessible to researchers.

Collective constructs are typically studied using one of two approaches: 1) key informants or 2) combining individual members’ perspectives to arrive at collective-level constructs. Both in organizational research and in family research, key informants frequently are used to represent the views of the collectivity. Marketing scholars have examined the benefits and drawbacks to using this approach (see John and Reve 1982; Phillips 1981) with the general concern being that key informant perspectives may differ from others in the collectivity and misrepresent certain views of the group. Family
consumer researchers typically rely on a parent or a dyad (spousal or parent-child) within the family as key informants.

The second method for studying collective constructs often is to integrate or group together individual perspectives to generate a collective-level construct. For instance, individual utility functions could be grouped and weighted by power, influence, involvement, and so on to generate a joint utility function. Similarly, when generating interview data, researchers might combine individual perspectives and compare and contrast these (McCarthy, Holland, and Gillies 2003). In this case, researchers observe similarities and differences in stories from different individuals.

I contend that the collective narrative method has advantages over both the key informant and aggregating individual perspective approaches in that collective narratives are co-constructed in situ, among participants. Thus, there is no need for grouping perspectives together. Instead, what results is interactional data, and consumers have opportunities to respond to one another directly. Also, as previously mentioned, new collective perspectives that may differ from individual perspectives emerge naturally in conversation using this method. The collective narrative method focuses on interaction and is dynamic, which allowed me to observe the co-construction of families’ identity goals in particular for this study, but also permits researchers to study other collective constructs (i.e. group decisions, collective memories, joint preferences) in a new way.

Across disciplines, analysis of collective constructs rarely moves beyond dyads, despite calls for moving beyond this level in group or family research (Aribarg et al. 2002; Koenig Kellas 2005). In the present study, I collected data from all available members of the family (as defined by participants) in a group setting. I also asked follow-up questions of relational units (including dyads and triads) and individuals in order to produce family, relational, and individual-level data. The outcome is a different assortment of data then we previously have used to study collective or joint constructs. This is especially important to my study—and for others who intend to examine different relational groupings in families or in organizations—because I recognize collective, relational, and individual perspectives as potentially distinct from one another and treat them as such. In other words, examining multiple identity bundles (including the family as a collectivity) as the unit of analysis offers data that was previously not accessible.

In order to capture a detailed account of the interaction among participants, I coded for and analyzed both verbal and non-verbal communication. My adaptations of existing coding procedures to account for interactional data may aid future researchers interested in applying the collective narrative method. The narrative component distinguishes this method from other group interviewing strategies (i.e. focus groups) used in consumer research. Further, although narrative structure has received little attention in consumer research (for exceptions see Escalas and Bettman 2000; Stern 1995; Stern, Thompson, and Arnould 1998), in the current study, I examined both the content of the narrative (what was said) and the structure of the narrative (how the story was told). Escalas and Bettman (2000) analyzed individuals’ consumption narratives to reveal consumers’ goals and to determine how brands were presented in these stories. My study directly elaborates
on this method by gathering collective consumption narratives to reveal co-constructed identity goals of relational units and collectivities. This maintains the benefits of the narrative method for consumer research and adds the necessary dynamics for studying collective constructs using this method.

One of the most compelling contributions of this method is that the collective narrative procedure allows researchers to access truly collective constructions of participants’ experiences. Using this method, I was able to capture the way that families interact (how they are a family; how they do family; how they respond to one another) by observing the collective telling of their narratives. The narrative is a performance of family identity, but it also reveals the interplay of identity bundles within the family. Echoes within a family (i.e. Addyson/daughter: “We were going to have our feet dangle in the water.” Bob/son: “Yeah. We were going to have our feet dangle in the water, and…” at varying levels of intensity are more easily uncovered in this collective narrative than if the voices were individually combined. Although we would see redundancy of themes in individual interviews, we would not see the way the voices follow each other, mirror one another, answer in unison, and collect into a bundle. Coalitions form as echoes with other voices instantiate identity bundles. Similarly, discordant voices may seem disagreeable in individual interviews, but in the context of a collective narrative, they may playfully entire other voices to participate. This is reflected through competition in telling (Sadie/mother: “Who wants to start?” Elise/daughter: “Me!” [raises hand]. Kali/daughter: “Me.” [raises hand]) and also in monitoring one another for errors (Ajay/son: “We normally get candy.” Lacey/mother: “We never do that. No we don’t.”). Further, when my observations of family interaction during the narrative were juxtaposed with interaction during the reported identity performance (the family vacation) during analysis, it was evident that family dynamics were replicated. For instance, families who took turns, yielded the floor, and echoed one another during the telling of their narrative, also described behaviors of turn-taking, yielding, and agreement while on vacation. These kinds of patterns cannot be observed with an individual voice at play, but only as families collectively tell stories do we see harmonies and departures.

Table 1: Family Demographics  
(using pseudonyms)

<table>
<thead>
<tr>
<th>Family Name</th>
<th>Family Form</th>
<th>Family Members</th>
<th>Relationship</th>
<th>Age</th>
<th>Grade</th>
<th>Occupation</th>
<th>Ethnicity</th>
<th>Destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mason</td>
<td>Married (First)</td>
<td>Peter*</td>
<td>Father</td>
<td>41</td>
<td>CPA</td>
<td>Caucasian</td>
<td>Black Hills, SD</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cathy*</td>
<td>Mother</td>
<td>41</td>
<td>Bank Compliance Officer</td>
<td>Caucasian</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bob*</td>
<td>Son</td>
<td>8</td>
<td>2nd</td>
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*Indicates which family members participated in the interview
SELECTED REFERENCES
(Full reference available upon request)


THE DARK SIDE OF EMOTIONAL ATTACHMENT AND CUSTOMER CO-CREATION

Fernando R. Jiménez, Oklahoma State University

INTRODUCTION

Emotional attachment reflects an emotional bond connecting an individual with another entity. Extant research supports the idea that consumers may develop an emotional attachment (EA) to specific objects, brands, or places. How and why the bond is initiated and what happens after the emotional connection between the consumer and its products are relevant issues constantly addressed by consumer behavior researchers. In my investigation, I contribute to the existing literature in two ways. One, I suggest a situation where a bond between a consumer and a good may be started (i.e., customer co-creation). Two, I propose that there may be some outcomes of such emotional connection that may not be positive for a company.

In this paper, I discuss the theoretical rationale for both of my propositions. First, I develop a literature review on emotional attachment and customer co-creation to see whether they share common antecedents or consequences in order to theorize the type of relationship between the two constructs. Second, based on the literature review, I point out the research gaps that I am attempting to fill and their theoretical and practical relevance. Third, I propose a model for co-creation’s impact on emotional attachment and the negative outcomes, and I hypothesize the relationships among the variables. Finally, I end up with future research implications.

LITERATURE REVIEW

This review is organized in three sections. The first section discusses relevant research conducted in the area of emotional attachment. The second section reviews the literature related to customer co-creation. In the third section, I expand on the research gap that I attempt to fill.

Emotional Attachment

Attachment theory emerged from observing the behavior of babies and toddlers in the presence and absence of their caregivers (see Bowlby 1969). Thus, the foundations of the theory are in the domain of mother-baby relationships. Since the first study on attachment, the literature has extended to other domains, such as attachment to owned objects (e.g., Kleine and Kernan 1991; Kleine and Baker 2004; Richins 1994a, 1994b; Kleine, Kleine, and Allen 1995; Belk 1992; Wallendorf and Arnould 1988), brands (e.g., Thomson, MacInnis, and Park 2005), places (e.g., Eisenhauer, Krannich, and Blahna 2000), human relationships (e.g., Baldwin, Keelan, Fehr, Ehns, and Koh-Rangarajoo 1996; Lastovicka and Joachimsthaler 1988), and attachment prior to possession called “option attachment” (e.g., Carmon, Wertenbroch, and Zeelenberg 2003; Ariely and Simonson 2003). In marketing, researchers acknowledge the importance of the study of attachment because of its relation to desirable marketing consequences (e.g., commitment, satisfaction). In this paper, I focus on the emotional attachment to objects.
I define emotional attachment to objects in accordance with the general definition of emotional attachment by Jimenez and Voss (2007); Park and MacInnis (2006); Kleine and Baker (2004); and Shultz, Kleine, and Kernan (1989). That is, emotional attachment reflects the emotional bond connecting an individual with a specific object. The connection can start before possession of the object and continues in a dynamic status over time. Also, emotional attachment to objects has the property of strength (Kleine and Baker 2004).

Although EA is often confounded in the literature with its antecedents (Jimenez and Voss 2007), there are some variables that are often considered predictors of EA. Such variables include self-extension, identity, meaning, proximity, and interaction.

Attachment to possessions has been related to an individual’s extended self. The extended self is a construct that reflects who the person is through his or her possessions (Belk 1988). According to this perspective, those possessions that better reflect who the person is become more meaningful and thus the person connects to them. Identity is also closely related to self extension. However, this literature concentrates on the role of possessions in defining the person’s individual and group identity (e.g., Kleine, Kleine, and Kernan 1993).

Richins (1994b) views a possession’s value as deriving from meaning. She proposes two types of meaning: private and public. Private meanings are those assigned to the possessions by the individual himself, whereas public meanings are assigned by outsiders. So more meaningful objects are likely to be more cherished, valuable, and less subject to exchange. The extended self, identity, and object meaning antecedents are the most frequently discussed antecedents in the material possession attachment literature (e.g., Kleine and Kernan 1991; Kleine and Baker 2004; Richins 1994b; Kleine et al. 1995; Belk 1992; Wallendorf and Arnould 1988; Ahuvia 2005).

The final perspective suggests that proximity and interaction with an object may predict emotional attachment. For example, although proximity is often also viewed as an outcome, it has been proposed as an antecedent to attachment (e.g., Bowlby 1979; Hazan and Shaver 1994; Jimenez and Voss 2007). Proximity increases the likelihood of interaction with the object. Carmon et al. (2003) argued that proximity, even before the possession of the object, increases the attachment to it. In what they called “option attachment,” they proposed that there is a sense of prefactual ownership of the choice options. Ariely and Simonson (2005) also found evidence of this phenomenon in the auction context. They found that the higher bidders thought more concretely about possessing the object and therefore created a partial attachment through a mental interaction with it.

Although these perspectives are distinct, they also show commonalities. They agree that the objects to which a person is attached represent a degree of “me-ness.” The object becomes special and useful in defining who the individual is. Another commonality is that the object has meaning. The meaning helps the individual narrate his personal (e.g., photographs) and his group’s (e.g., monuments) past, present, or future. As I will later
point out, participating in the creation of an object may also be linked to these antecedents since it could evoke a feeling of “me-ness” through interacting with the co-created object even before consumption.

Emotional attachment has been included in models where it correlates to several marketing consequences. For example, it has been argued that EA is related to trust, commitment, and satisfaction (Rempel, Ross, and Holmes 2001; Spake, Beatty, Brockman, and Crutchfield 2003; Thomson 2006; Thomson et al. 2005); consumer defections (Liljander and Strandvik 1995); consumer’s forgiveness (Ahluwalia, Unnava, and Burnkrant 2001); disposal choice (Walker 2006); brand loyalty; and willingness to pay (Thomson et al. 2005). As the reader may recall, some of the suggested consequences of emotional attachment are also suggested consequences of co-creation, such as satisfaction, commitment, and loyalty. I return to this interesting point in the next section.

Also, it is important to mention that the aforementioned consequences are related to positive or favorable implications (e.g., satisfaction, loyalty, commitment). It is evident that emotional attachment to brands, companies, or even products may be good for a business. However, little investigation has been done regarding the dark side of emotional attachment. Since emotional attachment to material possessions is object specific, there might be implications for repurchase cycles, life-time value of a customer, or related variables that have to do with the timing of repurchase. For now, the purpose is to bring to the reader’s attention this important matter that has been overlooked in prior research. I will come back to this issue in the research gap section.

Customer Co-Creation

Customer co-creation, which refers to customer interaction with a company to create a good, is a growing practice in today’s marketing efforts. Customer participation in the business process in manufacturing is becoming more common, partly due to technological capabilities (i.e., Internet). For example, Adidas allows customers to participate in the design of their tennis shoes (http://www.adidas.com/miadidas). Customers create their own design to be fabricated by the company. Other examples that allow the customer to design include Dell (http://www.dell.com), where one can configure a computer and personalize the body design and style or engrave a name. Macintosh is doing the same approach with its ipods (http://www.store.apple.com). Even car companies are allowing greater customization such as the “build your Pontiac” campaign (http://www.pontiac.com).

Examples of customer engagement in hands-on production include Build-a-Bear (http://www.buildabear.com), where customers are allowed to choose from a variety of materials and guided through the production of their own teddy bears. There are also examples of more complex goods being assembled by consumers, such as cars (http://www.factoryfive.com). The variety of goods that a person can co-create is increasing every day. One can design jeans, gardens, houses, dresses, etc., or one can physically get help to assemble toys, or furniture, or a skate board, or golf clubs. The point is that the customer’s input into the value chain process for manufactured goods is
increasing, and companies are constantly encouraging customer participation in co-creation of goods.

In this paper, I view products as involving a combination of tangibles and intangibles. I focus attention on the business processes that deal with the creation of a tangible good. That is, in the case when a physical product is used by the individual who co-created it, such usage may also involve storage, maintenance, repair, or disposition. Next, I define the concept of co-creation. Then, I discuss the main findings from published co-creation research.

In services research, customer participation, which refers to customer engagement in the creation and delivery of a service, has long been acknowledged (e.g., Meuter, Bitner, Ostrom, and Brown 2005; Dellande, Gilly, and Graham 2004; Bitner, Faranda, Hubbert, and Zeithaml 1997; Kelley, Donnelly, and Skinner 1990; Mills and Morris 1986; Bowen 1986; Lovelock and Young 1979). For a long time, the focus of customer co-creation was confined to the services field because customer interaction with companies in the co-creation of industrialized goods was limited (Wikstrom 1995; Bowen 1986). Bowen (1986, p.373) wrote that customer participation works in the services world, which is different from the industrialized manufacturing world where “customers are typically distant spectators in this game.” Nowadays, customer participation in production activities of manufactured goods is different. Due to technological innovations, customers can now participate more in the creation of their goods (Sharma and Sheth 2004; Sheth, Sisodia, and Sharma 2000).

Figure 1 The Co-creation Line
With the inclusion of the concept of co-creation in the goods context, new terms have been introduced to reflect customers’ interaction with manufacturing companies. These new terms include: customization (Piller 2005), customerization (Wind and Rangaswamy 2001), consumer empowerment (Prahalad and Ramaswamy 2004a, 2004b), co-creation marketing (Sheth et al. 2000), and co-production (Lusch, Vargo, and O’Brien 2007; Etgar 2007). The common denominator in these new terms is that the customer can interact with the company – not only in an intangible service process, but also in the production of tangible goods – in one or more levels of the value chain. There are a limited number of empirical papers on co-creation, co-production, or customization (Meuter et al. 2005; Piller 2005), and that may be the cause of a lack of definitional consistency and confusion of terms. In a general sense, it is implied that co-creation means any kind of interaction between a customer and a company that results in a product.

Drawing from the previous literature, I define co-creation, within the context of the co-creation of tangible goods, as the level of a consumer’s interaction with a company in one or more activities that precede the purchase of a tangible product. I refer to co-creation as a level in the sense that it reflects the extent of the customer’s participation rather than a dichotomous variable where there is or is not an interaction. For example, two customers may engage in co-design activities, but their level of participation may vary in terms of the extent of their involvement in the activity or amount of input and interaction. The interaction is facilitated by the company to create a good. These activities may include product ideation, design, production, and customization among others (see Figure 1). Thus, I conceive of co-creation as an umbrella term that refers to a number of different participative interactions, which may vary in extent, between customer and companies at various levels of the value chain.

Most of the work done in the co-creation area has been of a conceptual nature. Scholars are still trying to limit the scope of the term, define the activities involved in the process, and determine its implications (Piller 2005; Etgar 2007). There is a small number of empirical studies that focus on identifying a theoretical network related to the co-creation concept. In order to present relevant findings related to the concept of co-creation, I will proceed in the following order. First, I will discuss topics covered in conceptual papers. Then, I present the antecedents of co-creation. Third, I will present the moderators and mediators of co-creation. Finally, I will talk about the consequences of co-creation.

First, as mentioned earlier in this section, pioneering conceptual papers on the topic of customer participation and co-creation emerged from the services literature, but current conceptual papers have expanded to the interaction of the customer in manufacturing settings. Early researchers introduced the customer participation concept in services due to its importance to the company as a way to save cost, increase productivity, and manage customers as “partial employees” (e.g., Mills and Morris 1986; Bowen 1986; Chase and Tansik 1983; Kelley et al. 1990; Wikstrom 1995; Lovelock and Young 1979). Also, researchers proposed taxonomies of the level of consumer participation in services (Bitner et al 1997; Kellogg, Youngdahl, and Bowen 1997). More
recently, conceptual papers in the literature (e.g., Boyle 2007; Etgar 2007; Lusch et al. 2007; Lusch and Vargo 2006; Piller 2005; Sharma and LaPlaca 2005; Sharma and Sheth 2004; Prahalad and Ramaswamy 2004b; Wind and Rangaswamy 2001) mainly focus on the boundaries and applications of the construct in the manufacturing and marketing fields. Most researchers agree that the key aspect for co-creation and related topics such as customization, personalization, or co-creation of value is the interaction between the customer and the company. Customer interactions with business to create a commercial outcome are the main focus of their discussion. Furthermore, the discussions in the conceptual papers also suggest that such interactions are now more feasible in the manufacturing context as well.

Second, some research investigates antecedents of customer co-creation from the consumer perspective. These antecedents have been primarily discussed from the services standpoint. Investigators have proposed antecedents for customer participation in consumer communities (Bagozzi and Dholakia 2006), self-service technology trial (Meuter et al. 2005), self-service recovery (Dong, Evans, and Zou 2007), and service encounters (Dellande et al. 2004; Kelley, Skinner, and Donnelley 1992; Bowen 1986). For a summary of antecedents see Table 1.

<table>
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<tr>
<th>Author</th>
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<tr>
<td>Bagozzi and Dholakia 2006</td>
<td>Virtual Communities</td>
<td>Desire, Social Norms, Social Identity</td>
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<tr>
<td>Dong et al. 2007</td>
<td>Self Service Recovery (reuse)</td>
<td>Customer ability, perceived value, satisfaction</td>
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<tr>
<td>Meuter et al. 2005</td>
<td>Self Service Technologies</td>
<td>Innovation characteristics, Individual differences, Consumer readiness (role clarity, motivation, and ability)</td>
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<tr>
<td>Dellande et al. 2004</td>
<td>Patient – Doctor</td>
<td>Role ability, expertise, motivation</td>
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<tr>
<td>Kelley et al. 1992</td>
<td>Services</td>
<td>Motivation, organizational socialization</td>
</tr>
<tr>
<td>Bowen 1986</td>
<td>Services</td>
<td>Role clarity, ability, and motivation</td>
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</table>

Moderating variables have been used to explain variation between customer participation and its outcomes, mainly satisfaction. Simonson (2005) proposed the fit between the customized products and the customer’s needs and wants to be a moderator for satisfaction. Dallaert and Stremersch (2005) proposed that customization process complexity is negatively related to product evaluations. They also proposed that complexity is different for customers depending on their level of expertise. Also, personality traits are proposed to moderate customer participation (Solomon 1986; Xu
Finally, Bendapudi and Leone (2003) proposed that the co-creation \( \rightarrow \) satisfaction relationship is moderated by the customer’s acceptance of responsibility in the outcome of the transaction.

Some researchers have included mediators in their models, attempting to explain how consumers engage in co-creation activities. For example, consumer readiness, which is composed of role clarity, motivation, and ability, mediates the effect of both innovation’s characteristic and individual differences (personality) on consumer trial in self-service technologies (Meuter et al. 2005). For Dellande et al. (2004), goal attainment partially mediated the relationship between customer compliance with doctor’s instructions and satisfaction. For Dong et al. (2007), consumer readiness after trial is also a mediator between trial and future trial.

The consequences of customer participation have been documented following two perspectives: from the company and from the customer. From the company’s perspective, investigation focuses on the impact of customer participation in cost reduction potential for the firm and the impact of such participation on service quality. For example, some authors (i.e., Lovelock and Young 1979; Mills, Chase, and Margulies 1983; Mills and Morris 1986; Bowen 1986) focus on the increment of productivity and reduction of cost that the firm would attain by substituting employee labor with customer participation. Along with the perspective of the customer as a “partial employee,” Kelley et al. (1992) and Chase and Tansik (1983) explored the consequences for the organizational climate of having customers as employees.

From the consumer’s perspective, customer participation is related to satisfaction. Dellande et al. (2004) showed that when a patient of health services effectively does his part in following the doctor’s recommendations (higher patient compliance), the patient experiences higher satisfaction with the service regardless of the outcome. Bendapudi and Leone (2003) argued that given the same outcome, customer satisfaction with a firm changes depending on customer participation in the production. More specifically, customers tend to take credit for good results when they participate in the production. Lengnick-Hall, Claycomb, and Inks (2000), pointed out that the level of satisfaction with a service increases as customer participation in the service increases. Also, Meuter, Ostrom, Roundtree, and Bitner (2000) explored the sources of satisfaction and dissatisfaction during customer participation in self-service technologies.

There are other frequently mentioned consequences. Perceived quality differs according to the level of customer participation in the service (Kelley et al. 1992; Lengnick-Hall et al. 2000). Intentions to re-participate in co-creation depend on the previous experience that the customer had with his participation (Dong et al. 2007). Commitment and loyalty increase as customers are encouraged to participate in small community groups such as Harley Davison (Bagozzi and Dholakia 2006). Simonson (2005) also proposed that customer participation in choosing personalized options could create loyalty when the customer has firmly determined preferences. Another consequence is product evaluation. Dellaert and Stremersch (2005) showed that
complexity in the process of participation is negatively related to product evaluations. Finally, customer participation is related to customer involvement in new products.

In sum, I have examined the main findings in the co-creation literature. It is an interesting topic that has evolved from the services context into the branding and manufacturing contexts. The core concept in customer co-creation of goods and services is the interaction between customers and companies. Empirical research is scarce, and the nomological network of the construct is relatively limited. Further research on the relationship between co-creation and other concepts must be pursued in order to build a conceptual network that allows more understanding, explanation, and prediction that benefits marketing academics, customers, managers, and society.

Research Gap

The gap that I attempt to tackle in this research is twofold. First, after reviewing the relevant literature on co-creation and emotional attachment, I see that there are several variables (i.e., antecedents and consequences) that seem to be related to both constructs. So there is evidence to suggest that both variables may be related to each other. However, no empirical research has linked these two constructs. Second, as I argue in the literature review section, current research on emotional attachment has focused on linking the construct to favorable or positive marketing consequences (e.g., satisfaction, commitment). However, the probable “dark side,” or negative consequences, of such attachment have not been explored in the marketing literature. In this paper, I attempt to investigate these two gaps in the literature to better understand the relationship between EA, co-creation, and negative outcomes of such relationships. I will present an extant explanation of each of the two gaps, and I will state why I consider that this research is both interesting and useful for marketing academics and marketing managers.

Gap 1: The Relationship Between Emotional Attachment and Co-Creation

I propose that there is a gap in the nomological network that includes co-creation and emotional attachment. A nomological network is “the set of factor-to-factor relationships derived from the relevant theory and stated at an abstract, theoretical level” (Judd, Kidder, and Eliot 1986, p. 46; Cronbach and Meehl 1955). It can also be thought of as a network of expected relationships (Nunnally and Bernstein 1994; Voss, Spangenberg, and Grohmann 2003). A common task of researchers is to fill the gaps in the nomological network of conceptual frameworks. By understanding such a network, investigators can infer causal relationships between antecedents and consequences, account for variance explained, and better explain the world (Mowen and Voss in press). Understanding how the variables are interrelated helps in understanding, explaining, and predicting phenomenon, which is the objective of theory (Bagozzi 1994). Thus, finding new variables or new relationships between variables in a nomological network is a contribution to theory.

Co-creation and emotional attachment seem to be part of the same nomological network because they seem to have common antecedents and consequences. Common antecedents are prefactual interaction with the object and “me-ness.” First, co-creation and EA have both been shown to be related to customers’ involvement before
consumption. Co-creation involves consumer interaction with a company in producing a good. Also, co-creation means that the customer is engaged in the production process at some level of the value chain. This involvement in the creation of the product before it is ready to be used allows the customer to have a mental (e.g., designing) or physical (e.g., assembling) interaction with the product before consumption. This sense of anticipated consumption may also be related to emotional attachment. Emotional attachment has been suggested to be antecedent by both prefactual interaction (option attachment) and proximity. Since making an object may involve several steps over a period of time and the co-creator may have to be engaged and proximal to the object, the act of co-creation may elicit attachment.

The second common antecedent is the degree of me-ness. One reason why customers get involved in co-creation is to better match their idiosyncratic needs and wants with the product being made. Co-creation involves the customer being able to choose and/or make his own good. This me-ness is also relevant in the emotional attachment literature. Emotional attachment has been shown to be more likely to occur towards objects that reflect the customer’s identity. That is, objects that better reflect who the person is or is not are more valuable to that person. So, the degree of me-ness in the object is related to both co-creation and emotional attachment.

Co-creation and emotional attachment also share common consequences, such as satisfaction and commitment. As exposed in the literature review, customer satisfaction is a common dependent variable of customer participation in the creation of a good or service (e.g., Dellande et al. 2004; Bendapudi and Leone 2003; Lengnick-Hall et al. 2000; Meuter et al. 2000). Additionally, I argue in the conceptual review of emotional attachment that in distinct constructs, there is a link between EA → satisfaction. Another variable that appears in both literatures is commitment (e.g., Bagozzi and Dholakia 2006; Rempel et al. 2001; Spake et al. 2003; Thomson 2006; Thomson et al. 2005). Commitment refers to the degree to which an individual views the relationship from a long-term perspective and has a willingness to stay with the relationship even if things are difficult (Thomson et al. 2005). EA is proposed to lead to commitment (e.g., Thomson et al. 2005), and customer participation is also thought to lead to commitment (e.g., Dellande et al. 2004; Bagozzi and Dholakia 2006).

In conclusion, there is a missing link between co-creation and emotional attachment as evidenced in their common relationships with antecedents (i.e., interaction and me-ness) and consequences (i.e., satisfaction and commitment). These common relationships may suggest that there is a possible relationship between co-creation and emotional attachment. With this understanding of these relationships and boundaries, I construct a more inclusive nomological network.

Situating emotional attachment and co-creation is interesting and important for both marketing academics and marketing practitioners. For marketing academics, my research is relevant because it adds to the understanding of the nomological network involving both constructs and the relationship among them. Few studies have explored the psychological implications of co-creation (e.g., Dellande et al. 2004; Bendapudi and
Leone 2003). More importantly, the relationship between EA and co-creation has not yet been explored.

From a managerial perspective, the study of the relationship between EA and co-creation is also important. Emotional attachment and co-creation have been shown to possess similar desirable outcomes for businesses (e.g., satisfaction and commitment). Marketing managers usually tailor their efforts in order to influence such outcomes. Understanding the relationship and boundaries between the two variables may guide managers to make better decisions in the marketing mix and the interaction opportunities that they provide to their customers.

In summary, there is a gap in the nomological network involving both co-creation and emotional attachment. There is evidence that they have common antecedents and consequences, but the relationship among the two variables is not known. Filling this gap in the literature is relevant to both marketing academics and marketing managers.

**Gap 2: The Dark Side of Emotional Attachment**

From the company’s standpoint, there is a trade-off when customers get attached to their goods. Emotional attachment has usually been related to desirable marketing outcomes (e.g., satisfaction, commitment, loyalty), however little is known about the negative or dark side of the construct, which has been overlooked (Kleine and Baker 2004). More specifically, in the case of co-creation of goods, the bond resulting from co-creation may pertain only to that specific object, not to the company or the brand. As discussed above, attachment to material possessions is object specific. That means that the customer may develop a bond specifically with the co-created object. If this is the case, there might be negative implications for outcomes such as repurchase intentions, lengthened repurchase cycle, anticipated customer lifetime value, and time of repurchase intention. These outcomes may be of more concern for durable products since it has been suggested that individuals tend to dispose of attached objects after a longer time of possession than other objects (e.g., Price, Arnould, and Curasi 2000; Curasi, Price, and Arnould 2004; Walker 2006). Thus understanding the relationship between EA, co-creation, and possible negative marketing consequences is relevant and interesting to academics and practitioners.

Marketing managers can benefit from understanding the relationship between co-creation, EA, and the negative consequences of such a relationship. Current marketing practices enable customers to interact at various levels of the value chain. Customers can now be co-creators of goods in activities ranging from design to production. This co-creation could result in undesired outcomes through emotional attachment to the specific co-created object. Attachment to a specific object may bring negative consequences to the firm such as increased possession time for the object, over-purchase frequencies, or resistance to adopting new products, all of which can translate to lower sales and lower profits for the company. Thus, it is of managerial interest to understand the impact of co-creation on attachment.
In sum, the negative marketing consequences of emotional attachment and co-creation have not been adequately explored. There are positive and negative tradeoffs when customers get emotionally attached to their products. The positives have received attention in the literature, but the negatives have been overlooked. One objective of this research is to begin to fill this gap. Attempting to sort out the relationship of these two focal constructs to all the possible variables in the nomological network is desirable but not possible. That task cannot be done in a single investigation. The proposed dependent variable to be explored in this article is the willingness to replace the object. In the next section, I further explain this variable.

THE MODEL

Customer co-creation is an umbrella term that refers to a number of different participative interactions, which may vary in extent between customers and companies at various levels of the value chain. In this model, I investigate the customer’s participative hands-on interaction in producing an object (i.e., co-production).

Figure 2 suggests a positive relationship between the level of customer co-production and attachment to the co-produced object. Additionally, Figure 2 also proposes that attachment to the object is correlated to the willingness to replace the object. These relationships suggest a mediating role of attachment between customer co-production and willingness to replace the object. Also, Figure 2 depicts a moderating effect of the degree of me-ness between customer co-production and attachment to the object. The experience on the co-production activity is also proposed to positively moderate the impact of customer co-production on attachment to the object. I further suggest that the impact of attachment to the object on the willingness to replace is moderated by the individual’s ability to manage his emotions.

Customer Co-Creation ➔ Attachment to the Object

I propose that the higher the degree of customer co-production, the higher the likelihood that the individual will feel attached to the co-produced object. There are initial clues that this relationship may hold. Wallendourf and Arnould (1988) investigated attachment to objects in different cultures. They reported that people of cultures where advertising is low were attached to their self-made handcrafts. Although the interpretation of their research is that people in that culture are less attached to advertised “commercial” objects, another interpretation might be that the individuals in those villages do not have the same offerings as their American counterparts. That is, those cultures are forced to make rather than buy (Lusch, Brown, and Brunswick 1992). The interesting part of their findings is that it may also suggest that a person making his own artifacts may be likely to get attached to them.
A probable explanation for this phenomenon may be an author-work identity retention effect. When a customer perceives his input as a distinctive part to the outcome, then he feels a sense of authorship. When individuals perceive an outcome as a result of their own work, their labor entitles them to a total or partial sense of property over the good. Furthermore, authors retain identity over the created piece of work (Locke 1690; also see Belk 1988).

Co-production requires a hands-on interaction between the good and the customer and it may vary in level of interaction. The interaction itself serves as a mechanism for the self extension. Identity extension gives the object special value by contributing to the author’s identity, and thus becomes part of the self that in turn is likely to elicit emotional attachment. Previous research (e.g. Ball and Tasaki 1992; Sivadas and Venkatesh 1995) supports the link between extended self and attachment.

Thus, due to the interaction with the object, I expect to see more attachment to the co-produced object when there is a higher co-production level (i.e., more customer-object interaction). This co-production in turn is positively related to the attachment to the object. Based on the prior discussion, I propose the following relationship.

H1: There is a positive relationship between customer’s co-production and attachment.

Attachment $\rightarrow$ Willingness to Replace the Object

Attachment, which reflects the emotional bond connecting an individual with a specific object, is suggested to be negatively correlated to the customer’s willingness to replace the co-produced object. Current theory may explain why a customer may show reluctance to replace the object to which he feels attached. Emotional attachment has been proposed as a mechanism that moderates loss aversion (Ariely, Huber, and Wertenbroch 2005; Novemsky and Kahneman 2005). Individuals are more reluctant to let go of objects to which they feel attached (Ariely et al. 2005; Curasi et al. 2004; Price et al. 2000; Irwin 1994; Boyce et al. 1992). Novemsky and Kahneman (2005) argued that emotional attachment could be a mechanism that mediates intentions to loss aversion. In
both cases, emotional attachment serves as a mechanism to explain why loss aversion may occur.

According to attachment theory, the individual who is attached to an attachment figure would behave in order to remain proximal to it. It has also been found that individuals tend to take a longer time to relinquish an object to which they feel attached (Park and MacInnis 2006; Curasi et al. 2004). It is expected that a person who feels attached to a specific object will be more reluctant to give it up or to replace it. Based on this discussion, I propose the following.

H2: Attachment is negatively related to willingness to replace a co-produced object.

**Moderators: Degree of “Me-ness” and Co-Creation Experience**

I suggest two factors that are likely to moderate the relationship between customer co-production and attachment. The first variable is the degree of me-ness in the object. Customers may engage in activities of co-production for several products, some of which may have a higher meaning than others. For example, for a musician, a piano may be closer to his identity than a chair. Previous work on emotional attachment suggests that EA increases when the object resembles part of the individual’s identity (Belk 1988). The degree of me-ness refers to the match between the object and the individual’s identity. If the object being created is one that the individual would use as a reflection of his identity (me-ness), then the emotional attachment resulting from the customer’s co-creation will be higher. Thus, as predicted in H1, there is a positive effect of co-production on emotional attachment when the consumer interacts with the product, and this effect will be greater when the object category being created is perceived as being related to the customer’s identity.

H3: The degree of me-ness positively increases the attachment to a co-produced object.

The second moderator is the co-production experience. Experiences are thought to be an important part of any company’s value offering (Prahalad and Ramaswamy 2004b). In this paper, I expect experiences to transfer to the co-created goods just as experiences and memories transfer in meaningful ways to souvenirs, memories, and pictures (Belk 1988, 1992; Ball and Tasaki 1992). For the purpose of this paper, the co-production experience refers to the overall evaluation of the process. If the overall evaluation of the experience is favorable, then there is a positive impact on the attachment to the object because the object will absorb the experience and thus create meaning (Belk 1988). On the other hand, when the experience is bad, the physical outcome can absorb undesirable associations. Thus, I make the following proposition.

H4: The experience in the co-production activity moderates the attachment to the co-produced object.
Moderation of the Ability to Manage Emotions

Emotion management has long been studied in the psychology literature. Mayer, Caruso, and Salovey (2000) propose that people have an ability-based intelligence for the recognition, interpretation, and management of their own as well as others’ emotions. They call such intelligence “emotional intelligence” (EI) and define it as the ability to monitor one’s own and others’ feelings, to discriminate among them, and to use this information to guide one’s thinking and action. These abilities relate but differ from traditional mental problem solving or standard cognitive abilities. In their study, Mayer et al. (200) concluded that there are three main factors involved in EI: perception, understanding, and managing emotion. In this paper, the focus will be on the ability to manage emotions since the interest resides on how people manage attachment in order to replace their possessions. It is expected that people with a higher level of emotion management are more likely to replace the object for another one that is functionally equivalent.

H5: At higher levels of ability to manage emotions, attachment will have less impact on willingness to replace the object.

CONCLUSION

This paper attempts to point out two contributions to the literature of emotional attachment. First, I suggest that customer co-creation may lead to emotional attachment to the co-produced object. Second, I propose that there may be some negative consequences for companies from a customer’s emotional attachment to goods (i.e., a “dark side”). The next step is to test the hypothesized model relationships using experimental settings.
REFERENCES


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WHO ARE YOU CALLING OLD?
NEGOTIATING MEANING IN THE ELDERLY CONSUMPTION
ENSEMBLE

Michelle Barnhart*, University of Utah

ABSTRACT

Over 18% of Americans over the age of 75 require assistance with daily consumption activities. Assistance is often provided by family, friends, and paid care providers in changing configurations over time. I refer to these people together with the elderly consumer as the elderly consumption ensemble. Through depth interviews with ensemble members, this research investigates how the consumption and marketing behaviors within the ensemble produce and reproduce socio-culture meanings old, family, friend, and employee. This paper reports the findings from the first iteration of analysis on a partial dataset. Additional data collection and analysis are scheduled for the next four to six months.

INTRODUCTION

The most recent United States census counted 36 million Americans over the age of 65 representing 12% of the population. By 2020, this rapidly growing group is expected to account for over 16% of Americans (Census 2008a). While improvements in health care have lead to increases in life expectancy, they have not eliminated many of the physical and mental limitations that often accompany old age and present challenges to consumption. In 2005, 6.4% of those between the ages of 65 and 74, and 18.3% of those over the age of 75 required assistance with one or more of the following consumption activities: using the telephone, traveling outside the home, shopping, preparing meals, doing housework, taking medications, and managing money (Census 2008b). The number of Americans needing assistance with these activities continues to increase, with those over 85 now representing the fastest growing segment of the population (Census 2008b).

It is apparent from research in economics and health care (e.g., Hiedemann and Stern 1999; Maloney and Finn 1996) as well as from everyday observation that adult children often provide assistance. Commonly referred to as “caregiving,” daily assistance to the elderly may also include paid in-home services and is likely to be a complex and dynamic process involving multiple people in changing configurations over time (Peek et al. 1997; Waldrop 2006). Thus family members, friends, and paid service providers may at various times participate in consumption with or for an elderly person. Marketing researchers have yet to consider this kind of consuming group despite its large and growing presence in our aging society.

Studies of group consumption have focused on the family (Davis 1976; Gilly and Enis 1983; Palan and Wilkes 1997), group decision making in the context of the firm (Webster and Wind 1972), and joint consumption of a shared experience by groups of friends (Ward and Reingen 1990). Consumption by an older consumer and those who assist him/her does not fall neatly into any of these categories. In fact, the people
involved in this type of consumption do not even technically qualify as a “group” in that membership boundaries are ambiguous, varying with factors such as type of consumption activity and people’s availability to assist. Conceptualizing this consuming unit is further complicated by the frequent presence of service providers who assist older people with consumption. These “consuming producers” may be even more engaged in the older person’s consumption than are family members.

The increasing number of elderly consumers receiving assistance with everyday consumption and the large number of adult children and paid service providers involved raise a number of important questions for marketing researchers. Questions include: What is consumption’s role in what it means to be old in contemporary American society? What happens to individual consumer agency as one ages and begins to experience consumption from a more socially embedded position? How do family members and paid providers who are consuming with an elderly person negotiate boundaries between family, friend, and employee?

In order to study these questions, I must first appropriately conceptualize the unique consuming unit from which they arise. I refer to this unit as the elderly consumption ensemble (ECE), and define the ECE as an elderly consumer and at least one other who together engage in consumption activities of that elderly consumer. The ECE is analogous to a jazz ensemble in which different members possess different competencies and are more or less engaged in consumption activities at any particular moment. Because the ensemble is constituted by members’ behaviors in relation to each other, its boundaries are necessarily ambiguous. For the purposes of this study, I bound ensemble membership to those whom informants mention as being “regularly” involved in consumption with or for the elderly consumer. For my theoretical framework I draw from literature on the social construction of old age, identity and subject position, and the social and creative nature of market relationships.

LITERATURE REVIEW

The Social Construction of Old Age

Old age is a social construction that gives meaning to an inherently ambiguous concept. Means of determining age have varied through history and between societies. Primitive societies marked old age by life events such as becoming a grandparent (Cockerham 1991). Modern societies more often tie age to chronological measurements of time alive, with some societies marking birth as the point in time when aging begins (e.g. the United States) and others counting from the time of conception (e.g. Korea). Yet chronology is at best a rough approximation of what it means to “be old.” We have all known someone who is a “young 80” or an “old 50.”

The current construction of old age in America exists within its own historical and political context, which I now attempt to briefly describe. The emphasis on the biological aspects of aging which still exist today dates at least to the early 1900’s when western medicine began to frame old age as pathology. Aging was seen primarily as a deterioration of the “normal” physical and mental functioning attributed to younger
adults. Associating aging with mental illness became so common that the words “senile” and “old” were often used interchangeably (Fennel et al 1988).

Passage of the Social Security Act in 1935 established a chronological definition of the beginning of old age as 65 and set the expectation that older people withdraw from the workforce. Notably, at that time only 7.8 million Americans, or 6% or the population had lived beyond their 65th birthday (Census 2008c). At about the same time, the field of social gerontology emerged. Many of its scholars adopted the popular sociological perspective of functionalism (e.g. Parsons 1942) and framed old age as a social problem in need of a solution. In their view, the aged—many of whom were now retired—were no longer contributing to the smooth function of modern society and had become a drain on it. Social gerontologists focused heavily on questions of what society should do with old people, and how to help old people cope with being separate from mainstream society.

In 1965 policymakers attempted to address some facets of the elderly problem by passing Medicare and the Older Americans Act. The political rhetoric in favor of Medicare once again emphasized associations between old age and illness, as well as those between old age and poverty. Both to address poverty among the elderly and to answer questions of what to do with the elderly and how to help them cope with their marginalized position, the Older Americans Act authorized funding for Area Agencies on Aging, Senior Centers, and other programs aimed at improving their daily lives.

Since the 1970’s, scholars have considered old age as a socially rather than a biologically constructed status. Scholars have considered how the experiences affecting older people are a product of a particular division of labor and structure of inequality (Townsend 1986), how old age is constructed through discourse (Coupland et al 1991) and narrative (Gullette 2004), and how it is played out in institutions and cultural norms (Haim 1994).

Today’s scholars generally agree that the dominant American social construction of old age includes the following characteristics. First, old age is a life stage category which in combination with others, gives order to the life span. The old age stage is associated with a set of expected behaviors that differ from those of other life stages. Since the passage of the Social Security Act, one of these expected behaviors is retirement. Secondly, largely due to political rhetoric surrounding the passage of Social Security and Medicare (Binstock 2005), old age is associated with increased financial need and physical and mental vulnerability. Third, people in old age are viewed as “separate” from mainstream society, inhabiting a marginalized position that is often stigmatized through rhetoric (Haim 1994). Social separation is due in large part to withdrawal or removal from the workforce. At its extreme, social separation manifests in the physical separation of the institutionalized elderly, who account for slightly less than 5% of those over 65 (Thompson and Brown 2002). Fourth, having been naturalized by discourses equating it to biology and in accordance with medical interpretations of age as pathology, the construction of old age focuses heavily on inevitable physical and mental decline. Finally, old age is cast as threatening in its close association with death. Notably, this association is a relatively recent development, having emerged after medical advances of
the early 20th century drastically reduced infant mortality. Prior to these advances, vulnerability to death was more closely associated with childhood, and the aged were more likely to be viewed as strong and healthy for having endured so long (Gullette 1997).

Unlike social constructions of gender and race (e.g. Dobscha 2003, Williams and Qualls 1989), old age has largely been unquestioned by marketing academics. Rather than investigate how old age is constructed in consumption and marketing behaviors, marketing researchers have studied elderly consumers as a manifestation of the dominant construction of the elderly as isolated (Kang and Ridgway 1996), vulnerable (Lee and Geitsfeld 1999), and cognitively deficient (Law, Hawkins, and Craik 1998; Cole and Balasubramanian 1993; John and Cole 1986; Yoon 1997). While these representations are appropriate for some older consumers, they are not for others. More importantly, by focusing on how old age affects consumption, these studies neglect the question of how consumption affects our understanding of old age.

Furthermore, as marketing researchers, we have ignored how our own theories contribute to the social construction of old age. One of the most commonly used segmentation schemes, the family life cycle, proposes that most of us will end our lives in an “Empty Nest” or as a “Solitary Survivor” (Wells and Gubar 1966), constructs that reproduce notions of old age as a time of isolation and loneliness. However, as we see in the opening statistics, many Americans do not consume independently or only with a spouse at the end of their lives. They instead become more socially embedded in a network of family, friends, and paid providers. How are we to conceptualize these consumers?

The way that we as marketing researchers have chosen to study elderly consumers has also contributed to the social construction of old age. Most marketing studies of elderly consumers have defined “elderly” as anyone over a certain chronological age. By using years alive to mark of old age, these studies have reproduced notions of chronological age as a meaningful determinant of life stage and of the elderly as a homogenous group. Yet there is little consensus regarding which age marks someone as old. Studies’ definitions of old vary widely, with some studies including consumers as young as 50 (Lee and Geistfeld 1999) and most studies including very few participants over the age of 75. Thus, most marketing research conducted on “the elderly” has in actuality been conducted on consumers between the ages of 55 and 75 despite the large and growing number of consumers aged 75 and above. Chronological distinctions between the young-old (65-75), old-old (75-85), and oldest-old (85+) that are now commonplace in gerontology (Cockerham 1991) have been all but ignored by marketing academics. Only a very few consumer behavior researchers have considered variations within the elderly population. For instance, Moschis and Mathur (1993) propose a segmentation scheme for the elderly based on attitudes and behaviors unrelated to chronological age, which they find is a poor predictor of consumption behavior.

This research turns previous questions of how old age affects consumption on their heads, asking instead how consumption affects our understanding of what it means to be
old. I bring consumption to the fore in trying to understand how ensemble members negotiate what it means to be old through their everyday consumption activities. Of interest is how the consumption and marketing practices of consumers and paid providers in the ensemble challenge or reproduce dominant social constructions of the elderly, and how new meanings are negotiated and produced over time.

Identity and Subject Position

Once viewed as something ascribed by others, the concept of identity is now more commonly understood as something that is claimed and performed (Giddens 1991). Many scholars believe that people take an active role in constructing their identities through everyday behaviors and personal narrative. Yet, identity construction is not unrestricted. I borrow from the perspective of symbolic interactionism (Blumer 1969; Stryker and Burke 2000) in understanding identity as one’s sense of self as it is constructed within the context of cultural, political, and market discourses, and in interaction with others who possess their own understandings of his/her social position (McAdams 1995). I refer to one’s social position as understood by others as a “subject position,” a term used by ethnic, race, and gender scholars (e.g. Lipsitz 1998) to mean a socially constructed position from which one acts but with which one does not necessarily identify.

Like ethnic and gender identity, age identity is claimed and expressed throughout the lifespan through self-narrative and physical performance (Gullette 2004). For instance, we often wear clothing that we feel appropriately reflects our age. There is even help available for those of us who are confused, as was seen in a December 2007 article on MSN.com instructing women how to “dress for your age.” Also like other identities, age identity is relational and hierarchical, with life stages and age cohorts (e.g. Gen X, Boomers) set in counter-distinction to one another. As is often the case with minorities (Goffman 1963), the elderly have been marginalized in contemporary American society, and their differences from the mainstream have been stigmatized. Society’s image of the elderly has been found to include several negative stereotypes, such as inflexibility, loneliness, lack of productivity, illness, senility, frailty, and lethargy (e.g. Bowling 1999; Cardinali and Gordon 2002; Grant 1996). Not surprisingly, many people are reluctant to claim an “old” identity for many years after others consider and treat them as such (Blau 1956; Riley and Foner 1968, Bultena and Powers 1978). In the terms of the current research, people are reluctant to identify as old even after being relegated to an old age subject position by others. This is consistent with the finding of Goldsmith & Heiens (1992) that subjective age and chronological age tend to diverge as people get older. That is, a 50 year old person is more likely to “feel his age” than is an 80 year old person, who is more likely to feel younger than his chronological age.

Discrepancies between how old one “is” and how old one “feels,” as well as those between one’s age related subject position and how one self-identifies are enabled by the nature of the aging process. Old is something which one becomes by crossing ambiguous boundaries rather than essentially is. We age gradually and continuously, making it difficult for even the most observant of us to recognize many physical and mental changes from day to day. Others we know are much more likely than we are to notice differences in us between “then” and “now.” New acquaintances will upon meeting us
immediately notice physical age cues, quickly ascribing an age category that strongly influences how they relate to us. Because we may not see those cues ourselves, or may interpret them differently, our self-identified age may differ considerably from the subject position to which we are relegated.

Consumer behavior research has focused on identity rather than subject position. Post-modernist scholars argue that identity is largely constructed and performed through consumption behaviors (Bourdieu 1973; Firat and Venkatesh 1995) and that identities can be legitimized by market institutions (Baudrillard 1988). Researchers have investigated how consumers construct ethnic and national identity (Askegaard, Arnould, and Kjeldgaard 2005; Penaloza 2007), gender identity (Holt and Thompson 2004), and family identity (Price and Epp 2005), as well as how consumers identify with brand communities (McAlexander, Schouten, and Koenig 2002; Muniz and O’Guinn 2001). Marketing researchers have not yet considered how old age identity or subject position is constituted through consumption. Perhaps this is because old age has been so naturalized and taken for granted, just as ethnicity and gender were for many years.

This research aims to fill that gap by investigating consumption’s role in positioning someone as elderly. What consumption and marketing behaviors within the ensemble position someone as an elderly consumer? What is the process by which consumers come to inhabit an elderly subject position with which they may or may not identify?

Market Relationships as Creative and Social

As mentioned previously, consumers do not act alone in constructing identities and subject positions. Market institutions can legitimize identities (Baudrillard 1988), such as when firms target retirees and thus acknowledge them as a meaningful age cohort and sought after consumers. The market also contributes to regulation of subject positions through advertising and discourses that produce and reproduce social constructions. These same discourses serve as resources for consumers’ identity projects (Arnould and Thompson 2005). Construction of identities and subject positions is therefore always a joint endeavor of consumers and marketers.

As an extension to the new service-dominant logic of the market (Vargo and Lusch 2004), Venkatesh, Penaloza, and Firat (2006) propose that the market can be viewed as a sign system in which consumers and marketers co-create socio-cultural meanings in addition to value in exchange and use. Marketers and consumers continually negotiate new meanings of behaviors, symbols, and market offerings that serve as the building blocks of consumers’ and marketers’ identities and subject positions. Negotiation of these meanings occurs through everyday interactions and market behaviors as marketers and consumers use the language of market discourse and respond to the normalizing forces of market institutions.

The meaning of “friend” is one such socio-cultural meaning that has drawn the attention of marketing researchers. Research on commercial friendships (Price and Arnould 1999; Grayson 2007) shows the nature and value of social exchange that may occur simultaneously with economic exchange. The development of friendships between
producers and consumers blurs the line between the social and market space and causes us to question what it means to be a friend, a marketer, and a consumer. Commercial friendships may be particularly intense and valuable in the lives of older consumers. Even one-time or short lived market encounters may serve as an important form of social contact for elderly consumers with limited opportunity for social interaction (Kang and Ridgway 1996). In the longer term market relationship of paid caregiving, older people often develop close, personal relationships with service providers (Aronson and Neysmith 1996; Eustis and Fischer 1991; Karner 1998; Neysmith and Aronson 1996). In one study of home health aids and their clients, Piercy (2000) found that 59% of respondents considered their relationships friendship and 39% of clients and aids thought of one another as “like one of the family.”

In addition to investigating how consumption helps us to understand what it means to be old, this research also considers how consumption behavior and market relationships within the ECE create and reproduce socio-cultural meanings of family, friend, and paid service provider. What consumption and marketing practices constitute a paid provider as employee, friend, or family? What is the process by which a paid provider comes to inhabit each of these positions? And, how do consumers and paid providers co-create value in these relationships?

Preliminary Data Collection, Analysis, and Findings

The following methods and findings sections of the paper reflect the first round of data collection and the first iteration of data analysis for this ongoing project. Additional data collection is scheduled for April through June. I expect that three to four more iterations of data analysis will be required to complete the project.

Methods

Data collection consisted of individual depth interviews with eleven informants representing five ECE’s. Interviewing began with five unrelated middle-aged (50s and 60s) informants who reported that an elderly parent was receiving assistance with at least one IADL. Six additional informants—three elderly parents and three paid providers—were then identified through snowballing. Elderly informants who had been diagnosed with Alzheimer’s disease or dementia were deemed ineligible for the study. I sought variation between ECE’s in the amount of assistance provided, types of assistance provided, number of family members and paid providers regularly involved in daily consumption activities, geographic dispersement of members, and gender of children and parents. The low number of male informants in the study is consistent with the lower life expectancy of men compared to women, the finding that 75% of family caregivers are women (Brody 2004), and the low likelihood of men choosing caregiving as a profession. All five middle-aged informants and their parents were middle-class, and ten informants were white, native born American citizens. One paid caregiver, Maria, was a naturalized citizen, having immigrated to the U.S. from the Philippines 19 years prior. Table 1 provides characteristics of ECE members with informants in bold type. The first member listed in each ECE is the elderly consumer, or central member. Subsequent members are family members and paid caregivers, or associate members.
Table 1: Characteristics of ECE Members

<table>
<thead>
<tr>
<th>ECE MEMBERS</th>
<th>A GE</th>
<th>GEN</th>
<th>RELATIONSHIP</th>
<th>DISTANCE IN MILES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Richard</td>
<td>8</td>
<td>M</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Veronica</td>
<td>6</td>
<td>F</td>
<td>Daughter</td>
<td>3000</td>
</tr>
<tr>
<td>Carla</td>
<td>5</td>
<td>F</td>
<td>Daughter</td>
<td>d</td>
</tr>
<tr>
<td>Maria</td>
<td>5</td>
<td>F</td>
<td>Paid Caregiver (12yrs)</td>
<td>Live-in</td>
</tr>
<tr>
<td>ECE2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jane</td>
<td>8</td>
<td>F</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Kevin</td>
<td>6</td>
<td>M</td>
<td>Son</td>
<td>1</td>
</tr>
<tr>
<td>Cathy</td>
<td>8</td>
<td>F</td>
<td>Paid Caregiver (3 months)</td>
<td>Live-in</td>
</tr>
<tr>
<td>ECE3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abbie</td>
<td>8</td>
<td>F</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Patricia</td>
<td>6</td>
<td>F</td>
<td>Daughter</td>
<td>10</td>
</tr>
<tr>
<td>Louise</td>
<td>n</td>
<td>F</td>
<td>Daughter</td>
<td>60</td>
</tr>
<tr>
<td>ECE4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lily</td>
<td>8</td>
<td>F</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Brenda</td>
<td>6</td>
<td>F</td>
<td>Daughter</td>
<td>70</td>
</tr>
<tr>
<td>Sue</td>
<td>0</td>
<td>F</td>
<td>Daughter</td>
<td>1500</td>
</tr>
<tr>
<td>Dahlia</td>
<td>5</td>
<td>F</td>
<td>Paid Caregiver (9 yrs)</td>
<td>10</td>
</tr>
<tr>
<td>ECE5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beatrice</td>
<td>8</td>
<td>F</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Sandy</td>
<td>5</td>
<td>F</td>
<td>Daughter</td>
<td>9</td>
</tr>
</tbody>
</table>

dCarla divides her time between a home 30 miles away from Richard and one out of state.

Notes: Informants are shown in bold. Relationship refers to the member’s relationship with the elderly consumer. Distance is geographic distance from the elderly consumer’s home. The length of employment of paid caregivers is in parentheses.
Eight interviews were conducted via telephone. The other three occurred face to face—two in informants’ homes and one in my home office. All interviews were audio recorded, and they varied in length from one to two and one half hours. One interview occurred over two sessions. Interviews began with informants’ descriptions of the elderly consumer’s (their own) current physical and cognitive conditions, living arrangement, and daily activities done alone and with assistance, including the nature of the assistance and who was providing it. Subsequent questions gathered oral histories of informants’ first recognition that assistance was needed, changes in the level and/or types of assistance over time, the process of hiring paid care providers, and changes in ECE members’ relationships over time. Paid providers were asked for a similar history beginning from the time they first became acquainted with the elderly consumer. The final set of questions explored informants’ reflections on their experience as an older person or caregiver, their own aging, and what it means to be old in American society. Transcription resulted in 232 pages of data which were entered into the software package Atlas.ti to facilitate coding and analysis.

I analyzed the data in accordance with strategies suggested by Lofland and Lofland (1995), beginning by identifying categories of consumption activities that informants mentioned as challenging for the central member and/or with which other members were providing assistance. I also derived the meanings that informants’ associated with these activities as they were currently being performed.

Findings
Categories of Consumption Activities

As informants described activities the central member did alone and with assistance, ten categories of consumption activities which were likely to become constrained for elderly consumers emerged. I call these categories personal care, driving, going to the doctor, shopping, managing medication, preparing meals, housekeeping, home and yard maintenance, personal business, and travel. Personal care includes bathing, toileting, and dressing, three activities that fall within the category of ADLs commonly used in the literature on caregiving. Driving is going from one place to another in a private car. None of the elderly consumers regularly used public forms of transportation such as buses or trains. Going to the doctor encompasses making the appointment and consulting with the doctor in the examination room, with driving to the doctor’s office more consistent with the previous category. Shopping refers to buying groceries and other regularly purchased household goods at a store. Managing medications consists of making sure that medications are taken in accordance with doctor’s orders, as well as monitoring reactions and determining the appropriate dosage of medications to be taken “as needed.” Preparing meals refers to preparing food for consumption by the elderly consumer. Housekeeping is defined as cleaning the interior of a home and doing laundry. Home and yard maintenance includes lawn care and making household repairs. Personal business consists of sorting and responding to mail and paying bills. Finally, travel includes going on vacation or to visit relatives for two or more consecutive days. I will elaborate the nature of constraints to performance of these consumption activities in the following section.
Overview of ECEs

Ensembles ranged in size from two to four members. Central members were between the ages of 82 and 89, and associate members were in their 50s and 60s. Three ensembles included paid caregivers. Maria and Cathy lived with Richard (89) and Jane (84) respectively, and Dahlia visited Lily (88) for several hours a day. Length of employment varied from three months to twelve years. Other associate members were all children of central members. Degree of involvement in the elderly consumer’s consumption varied greatly, as described in the brief profiles below. To make the temporal dimension of this study more clear, I use the present tense in describing people and situations as they were at the time of the interview, and the past tense only for historical descriptions.

Richard’s Ensemble

Richard is 89 years old and lives with his paid caregiver, Maria, in a metropolitan area of southern California. Richard’s ensemble consists of himself, Maria, and two of his five children, Veronica and Carla. Veronica lives on the East Coast, and Carla divides her time between a residence out of state and one that is within a 45 minute drive of Richard’s home. Richard, Maria, and Veronica were informants.

Richard hired Maria 12 years ago as a live-in caregiver for his wife who had Parkinson’s disease. When Richard’s wife died four years later, Maria continued to live with Richard as his caregiver. All three informants report that Maria is “like a member of the family.” Informants assess Richard’s cognitive and physical condition as good, with very poor eyesight as his only significant impairment. This constrains his ability to drive, maintain the house and yard, do housekeeping, and manage his personal business as it makes it difficult for him to read. Maria assists Richard with these activities daily. In addition, she does the laundry and shopping, cooks dinner for she and Richard each night, and helps him manage his medications. Richard performs all of his personal care independently and usually consults with doctors alone. Richard and Maria travel together two or three times a year. They had returned from an Alaskan cruise just prior to their interviews.

Veronica and Carla are in frequent phone contact with Richard and Maria, and become involved in his consumption sporadically in response to perceived needs. Most recently, they helped Richard to investigate and purchase a “reading machine” so that he could more easily read his mail and thus better manage his personal business. Carla also sometimes becomes involved in home and yard maintenance during her visits to Richard and Maria’s home. For instance, on a recent trip she and Richard purchased a new toilet and arranged for its installation.

Jane’s Ensemble

Jane is 84 and lives with her paid caregiver, Cathy, in a metropolitan area of the mountain west. Jane’s ensemble consists of herself, Cathy, and Kevin, one of her three children. All three ensemble members were interviewed for this study.

Kevin recalls that he first became involved in his mother’s regular consumption practices about five years ago while she was still living alone. After noticing that some of
her bills were past due and that she was no longer cleaning her house regularly, he began helping her with these activities. Approximately one year later, Kevin helped Jane sell her house, and they bought a new house and moved-in together. For most of the last four years, Kevin and Jane have had paid caregivers coming into the home for several hours a day while Kevin was at work. They hired Cathy as a live-in provider three months ago, at which time Kevin moved out of the house. He now lives with his girlfriend in the same neighborhood. Cathy describes her relationship with Jane as “definitely the employee,” while Jane describes them as “friends.”

Jane has difficulty walking, suffers from incontinence, back spasms, and diabetes, and exhibits some short term memory loss. These physical and cognitive ailments constrain Jane’s ability to perform all of the practices of interest in this study. Cathy now assists Jane with personal care, driving, shopping, housekeeping, preparing meals, going to the doctor, and managing medications. Since hiring Cathy, Kevin is no longer assisting Jane on a daily basis but continues to be regularly involved in home and yard maintenance, setting doctor’s appointments, preparing meals one day a week, organizing Jane’s medications each week, and managing her personal business. Jane no longer travels.

Abbie’s Ensemble
Abbie is 88 and lives alone in a rural town in Texas. Longevity seems to run in her family, as she has two sisters over the age of 90 and a brother who is 85. Abbie’s ensemble consists of herself and two of her four children, Patricia and Louise. Patricia lives 10 miles from her mother, and Louise lives about 60 miles away. Abbie and Patricia were informants.

Abbie and Patricia both report that Abbie is in good physical and cognitive condition although she has had several surgeries. Patricia notes that her mother sometimes gets confused about what the doctor has told her and that Abbie’s reflexes have slowed, which Patricia believes impairs Abbie’s ability to drive safely. Abbie is proudly independent and performs most consumption practices on her own, including personal care, housekeeping, preparing meals, shopping, managing medications, and personal business. Abbie continues to drive in her small town and still occasionally drives 2 ½ hours to visit one of her sisters. However, she and her sister have stopped taking their annual 3000 mile road trip so as not to “worry” her daughters.

Once a week, Patricia drives her mother to a larger neighboring town where the two shop for groceries and run other errands. Patricia says that she drives because her mother is not comfortable driving there. However, Abbie explains that she lets Patricia drive because Patricia thinks she’s the better driver. Patricia also occasionally assists Abbie with home and yard maintenance. Patricia and Louise jointly accompany Abbie to doctors’ appointments so that they too can hear the doctor’s recommendations.

Lily’s Ensemble
Lily is 88 and lives alone in an assisted living apartment in a mid-sized city in Texas. Her husband, Roger, lives in a skilled nursing facility several miles away. Lily’s
ensemble consists of herself, her paid caregiver, Dahlia, and her two daughters, Brenda and Sue. Brenda lives 70 miles away, and Sue lives in another state. Dahlia visits Lily for several hours each day. Brenda and Dahlia were informants.

Lily has dementia such that she has almost no short term memory. This impairs her ability to perform all of the consumption practices described above except personal care. Although Lily suffers from arthritis, she is physically able to bathe, dress, and make her bed independently. The assisted living staff provides home and yard maintenance, meal preparation, some housekeeping services, and administering of medications. Dahlia, who started working for Lily and Roger nine years ago as a personal driver, now also assists Lily with additional housekeeping, shopping, going to the doctor, and in conjunction with Sue, managing medications. Dahlia describes her relationship with Lily as a “dear friend or family member” and her relationship with Brenda and Sue as “like family.”

Brenda manages Lily’s personal business and sometimes goes with her to the doctor. Sue is in frequent phone contact with Brenda, Lily, Dahlia, and the assisted living facility staff. Although she lives in another state, Sue consults with doctors and sets appointments, works closely with Dahlia to manage Lily’s medications, and coordinates with Brenda regarding bills, insurance forms, and other important business that Brenda may receive in Lily’s mail. Lily no longer travels.

Beatrice’s Ensemble
Beatrice is 82 and lives alone in an urban area in Texas. Her ensemble consists of herself and Sandy, one of her two daughters. Sandy lives nine miles from her mother. Sandy was interviewed for this study.

Beatrice is in good physical condition but exhibits some short term memory loss. She has received contradictory diagnoses of her memory loss as dementia and simply age related. Sandy has noticed that Beatrice’s memory loss has impaired her ability to consult with doctors and to manage her personal business, commenting that “when she gets her mail, she may or may not open it.” Beatrice performs most consumption practices independently, including driving and travel. Sandy accompanies Beatrice to doctor appointments and is present during consultations, and Sandy has begun to help her mother with personal business by helping her to sort through her mail and reminding her to pay bills. Sandy has noticed that Beatrice’s house needs cleaning and is concerned that housekeeping is becoming physically challenging for her. Beatrice has repeated refused Sandy’s suggestions that she hire a housekeeper.

Oldness and Society’s View of the Elderly
Informants were asked what it means to “be old.” If needed, the question was followed by a probe about when they start thinking of others as “old.” Responses varied widely. Not surprisingly, elderly informants’ responses were more positive than those of younger informants. Richard said that to be old meant that you had been “lucky” in that you had not contracted a terminal illness or had a fatal accident. He added that old people have more wisdom than younger others, although he tempered his response with the acknowledgement that eventually old people start to lose cognitive abilities. Abbie and
Jane noted that with age people become more tolerant of others and accepting of life circumstances, respectively. Abbie added that old people gain an understanding and acceptance of their own limited knowledge.

“you don’t know as much as you thought you did when you were young. I know there’s a lot of things I don’t know.”

And later in interview,

“But it doesn’t bother me ‘cause I know what I know and I know what I don’t know.” --Abbie (88)

Younger informants responded much more negatively, with seven of eight mentioning loss as a primary component of being old. The most common characterizations of old age were physical deterioration (Maria, Veronica, Dahlia, Brenda), a difficult time of life because you can no longer function on your own (Maria, Cathy), and a time of spiritual transition (Veronica, Dahlia). Other responses included: the gradual exposure of the true self (Veronica); doing everything more slowly (Dahlia); being forgotten, ignored, or dismissed (Patricia); loss of cognitive ability (Sandy); loss of the ability to perform your normal activities (Kevin); and a natural stage of life (Brenda).

In addition to responding to direct questioning, throughout the interview informants mentioned characteristics of the old or changes that come with aging as they described their own experiences. Again, physical decline was commonly mentioned (Richard, Abbie, Brenda, Cathy). In explaining her reasons for working crossword puzzles and reading books, Abbie noted that old age is characterized by a risk for cognitive decline as well. Two informants described positive changes that they felt came with age. Veronica mentioned increased wisdom, compassion, and patience, and Abbie said that fear of dying decreases as you get older.

In talking about old age, informants revealed their own normative assumptions about the elderly as a category and about how American society views the elderly. At the end of the interview, I asked them directly to describe how society views older people. Two main themes emerged from their direct descriptions and the assumptions revealed previously. First, the elderly are seen as disconnected from mainstream society; and secondly, they are viewed as incapable. Regarding the first theme, informants described old people as less aware of what’s happening in society (Richard), critical of modern societal norms (Abbie), resistant to change (Brenda, Dahlia), and usually living alone or with other elderly people rather than in an intergenerational setting (Richard, Maria). Others added that society sees older people as a nuisance and attempts to push them aside (Jane, Cathy, Dahlia). The second theme of being incapable is evidenced in informants’ responses that the elderly are seen as “easy targets” (Sandy) and that people assume the elderly “don’t know anything” (Abbie). Assumptions of inevitable physical and cognitive decline and that the elderly have nothing to contribute (Veronica, Patricia, Cathy) also cast them as incapable. Finally, in their descriptions of what it means to be old, Maria and
Cathy both revealed a societal expectation that the elderly are incapable of having fun because their lives have become too difficult.

Other descriptions of how society views the elderly included: worthy of concern (Sandy), inactive (Abbie), as an overly homogenous group (Kevin), respected (Richard), and as a growing demographic that is becoming more accepted by the mainstream (Brenda).

Meanings produced in consumption.

I derived meanings from informant discourses as they described changes in practices and relationships within the ECE over time. Informants negotiate these meanings as they observe and engage in the consumption practices of the ensemble and attempt to understand themselves and other members. I represent each meaning as a continuum anchored by two poles, and I categorized meanings according to whether they implicate central or associate ensemble members. Three implicate the central member: Capable and Incapable, Accepting and Unaccepting, and Engaged and Disengaged. The first of these meanings also relates to associate members, and two additional themes relate only to associate members: Supportive and Controlling, and Family and Employee. The latter is relevant only for paid caregivers. Family members are always understood to be family. As ensemble members engage in or observe each of the ten categories of practices mentioned above, they make meanings, positioning themselves and other members along each continuum.

Regarding the central member, the meaning capable and incapable refers to the elderly consumer’s ability to perform a particular practice safely and effectively. As performance changed with advancing age, ensemble members observed these changes and interpreted the central member as more or less capable of performing that practice. Kevin recounts a change in how his mother prepared food that indicated to him that she was incapable,

“[S]he uh used to kind of fix food for instance, snacks for herself or get a drink. And uh one day uh I had one of these big soup cups on a saucer. Well she had put hot water in the cup and put it right on the burner of the range. She was heating water in a cup. It was boiling away. The cup was ruined, you know. But I’m glad it didn’t break at that point, you know. But that was a case where that was kind of a, bellwether moment that uh, boy, she can’t do this.” --Kevin, Jane’s son

It is important to note that for elderly consumers, movement along the continuum was not always unidirectional toward incapable. Medical interventions, changes in life circumstances, and the acquisition of adaptive devices such as Richard’s reading machine could cast them as more capable. Importantly, like younger consumers, elderly consumers may be understood to be capable of performing a practice even if they choose not to perform it themselves.
Accepting and unaccepting refer to the elderly consumer’s willingness to accept assistance with a consumption practice. Expressed discomfort or displeasure when receiving assistance indicates unaccepting, with outright refusal as its extreme. Grateful acceptance of assistance or compliance with suggestions indicates acceptance. For instance, Brenda interprets her mother’s cessation of driving as indicative of acceptance.

“She doesn’t really argue with us about stuff like that. I know that’s unusual but, you know just, like I told you, she just quit driving on her own. You know, she’s just very agreeable.” – Brenda, Lily’s daughter

Conversely, Sandy describes how her mother was initially unaccepting of assistance at doctor consultations.

“For a while she didn’t think that anybody needs to be with her at the doctor’s appointments…I found out when I did go with her to her primary physician, that they have told her several times why don’t you bring your daughter with you? … And um sometimes she would call me and sometimes she wouldn’t. If I, if I did get the call to go, she wouldn’t want me to be in the room with her when she talked to the doctors. But it was pointed out to her that um she was not relaying everything that the doctor said or she would be confused about what the doctor said, and so it would be best if I were in the room with her. She finally consented to that, but it was um, it’s kind of like the financial thing. She um didn’t want us involved in her business.” -- Sandy, Beatrice’s daughter

Finally, the manner in which practices are performed implicate elderly consumers as more or less engaged in the practice itself. Performing a practice independently implies complete engagement. Increased levels of assistance indicate decreased engagement such that a consumer may become completely disengaged if the practice is done for her by associate members. Like the other meanings, engagement and disengagement reflects a continuum. For instance, Maria goes to the grocery store alone almost every day to purchase items for her and Richard’s dinner. Before she goes, she and Richard jointly decide what they will have for dinner. Although Richard does not physically go to the grocery store, the manner in which they perform the practice implicates Richard as moderately engaged in shopping.

Regarding meanings that implicate associate members, the meaning capable and incapable was constructed differently for family members and paid caregivers than it was for the elderly consumer. While it is possible that a peripheral member could be seen as physically or mentally incapable, particularly if s/he is also elderly, the informants in this study were more likely to perceive themselves or other associate members as incapable due to geographic distance or skill set. Several of the practices of interest, such as driving and preparing meals, require that ensemble members be physically present in order to provide assistance. Others, such as managing medications or personal care, may be viewed as requiring a specific skill or constitution that the ensemble member may not
possess. For instance, Kevin viewed himself as incapable of assisting his mother with personal care.

“[W]ell now incontinence, incontinence is still incontinence. That, I could never, that’s something that uh I just can’t deal with. I mean even when I was changing diapers, I was not good at that. I was a gagger, you know.” - Kevin, Jane’s son

Supportive and controlling refers to the way in which the ensemble member provides or attempts to provide assistance with a consumption practice. Members are seen as controlling when they direct or take charge of an activity, and as supporting when they assist the central member without taking complete control. Importantly, here “controlling” does not necessarily carry an unfavorable connotation. A member could be viewed very positively for providing what others viewed as much needed control. For instance, Jane is grateful that Kevin took control of buying their new home when she felt that she was physically incapable of participating.

“Well there’s no way I could go out house hunting. I still, you know, have to have the walker. I’d have to get in the car and then get up, walk and I don’t know how I’d get up steps and things like that, so. It’s kind of nice to have somebody just to take care of you but not have to worry about, and uh my kids all know me well enough to know what I’d like, Kevin especially.” --Jane

Kevin is less comfortable with the control he exercises over his mom’s consumption.

“I never feel like I’m together with Mom. I always feel like I’m making her do stuff. I don’t feel like I’m really helping her. I’m kind of forcing her to conform.” --Kevin

The meaning family and employee emerges only for paid caregivers. This represents the tension between viewing oneself or another as an employee or as a member of the family. A central position on this continuum would be considering someone a “friend.” It has been shown that when elderly clients dismantle constructed personal boundaries and allow paid caregivers to cross, caregivers may be viewed as family (Piercy 2000). A lack of personal boundaries is evident in Richard’s description of his and Maria’s accommodations during their recent cruise.

“We stayed in the same room. There’s nothing private about us. Uh, and we don’t, we don’t have a problem with that. There’s always a place to dress and do these things.” --Richard

Provisional Model of Consumption Activities, Meaning Making, and Subject Positions

We relegate one another to subject positions based upon the meanings that we produce. For instance, people are often relegated to racial subject positions based upon the abstract meanings associated with cues such as skin color and/or facial features. I
propose that informants likewise relegate one another to the subject positions of elderly, family, and employee based upon the meanings they produce in consumption activities. Patterns of meanings manifest in each activity indicate how completely someone inhabits a position. For instance, Patricia going to the doctor with her mother produces a pattern of meanings that cast her mother as semi-capable, accepting, and engaged, a pattern of meanings that indicate to Patricia that Abbie is “getting older.”

The recursive nature of subject position and meaning making are depicted in Figure 1. Acting from their subject position, informants produce meanings in consumption activities. Their subject position is then informed by those meanings. Notably, members make meanings both by engaging in an activity and observing activities performed by other ensemble members. For instance, Veronica makes meanings related to Richard’s subject position by observing his interactions with Maria.

Changes in meanings related to an activity may occur in response to any number of physical or situational changes in the lives of ensemble members. Physical or cognitive changes with age may lead to a change in activity performance which casts the older consumer as less capable. Conversely, the purchase of adaptive devices such as Richard’s
reading machine may change performance such that he is viewed as more capable. Acceptance of greater levels of assistance with increasing need may implicate the elderly consumer as more accepting. Changes in desire to perform an activity may lead to changes in involvement and implicate someone as more or less engaged. Importantly, this decreased involvement may be unrelated to capability. For instance, Lily is capable of traveling to her daughter’s house for the weekend, but she does not because she no longer has the desire.

Regarding meanings related to associate ensemble members, informants often referenced their geographic distance from the elderly consumer as they interpreted their capability to assist with practices. Thus, moving is a likely driver of change in activity performance and related meanings. The meanings supportive and controlling may change as associate members respond to what they view as increasing needs. Finally, regarding paid caregivers, their position on the continuum between employee and family is likely to change with continuity of contact and with the gradual dismantling of personal boundaries between them and other ensemble members.

**Expected Theoretical Contributions**

This ongoing research seeks to contribute to the consumer behavior literature by calling into question arbitrary chronological definitions of age and bringing consumption to the fore in how we constitute old age. In so doing, this work will show how consumption and marketing practices challenge and reproduce the commonly accepted social construction of old age in contemporary American society. Furthermore, unlike previous work in marketing which has approached age as a biological state with cognitive and social implications, this work re-conceptualizes age as a constructed social position from which one consumes, similar to positions of ethnicity or gender.

Second, in focusing on the ensemble rather than the individual, this work adds to previous work on the socially embedded nature of consumption by elucidating how the nature of consumer agency changes with advancing age. Of particular interest here is how consumer agency is shared in the ensemble, and how ensemble members negotiate boundaries between marketers and family when paid providers too share in this agency.

Finally, this work also seeks to enhance marketing practices targeting elderly consumers by showing how paid providers and consumers co-produce value, adding to previous work on co-creation. Specifically, this work will contribute to our understanding of the importance of consumers’ and marketers’ negotiated meanings. In detailing how service providers and consumers co-create socio-cultural meanings for old age and family, I will update the recommendations and guidelines for relationship marketing as appropriate for doing business with elderly consumers and their families.
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PERSONAL SELLING ELASTICITIES: A META-ANALYSIS*

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ABSTRACT

The extant marketing literature offers few quantitative empirical generalizations regarding personal selling-sales (PS) elasticity and its determinants. In this paper, the authors present a meta-analysis of 3193 current-period PS elasticity estimates obtained from 46 empirical studies published over the last 4 decades. The authors find PS elasticity is higher in study settings involving products in early rather than late stages of their lifecycle, and in European rather than US markets. They also find PS elasticity estimates from more recent studies are smaller than those from older studies. In addition, past studies’ chosen form of sales response function, the temporal data intervals that were used, and the omission of promotions, advertising or lagged effects, significantly bias elasticity estimates. After correcting for these methodology-induced biases, the weighted mean corrected PS elasticity is about 0.30, a number significantly larger than extant meta-analysis estimates of advertising elasticity falling in the range of 0.1 to 0.2. The authors discuss the implications of their results for marketing and sales managers, researchers, and military recruiting policy makers.

Keywords: Personal Selling Elasticity, Meta-Analysis, Empirical Marketing Generalizations

There are currently an estimated 20 million full-time salespeople working for U.S. businesses (including about 15 million engaged in direct-to-consumer selling for companies such as Avon and Amway). In total, U.S. businesses are estimated to have spent about $800 billion on sales forces in 2006, almost three times the amount spent that year on advertising (Zoltners, Sinha, and Lorimer 2007). Personal selling is also prevalent in noncommercial settings, e.g., U.S. military recruitment efforts (Hanssens and Levien 1983). According to a Congressional Budget Office (CBO) study in 2006, the four arms of the U.S. military (Army, Marine Corps, Navy, and Air Force, including the respective National Guard and Reserve Forces) together employed nearly 21,450 recruiters in 2005, with the U.S. Army alone spending in excess of $100 million on experienced recruiters to meet its manpower goals in 2005 (Congress of the United States 2006). However, despite the critical role and expenditures associated with this activity in numerous industries, generalized quantitative estimates of the responsiveness or elasticity of sales to changes in personal selling effort (i.e., informative and persuasive personal communications by paid sales agents to prospective and current customers) are hard to find in the marketing and sales force literature.

The objective of this paper is to provide quantitative generalizations about the determinants of personal selling-sales (PS) elasticity and its magnitude via a formal meta-analysis of extant empirical studies encompassing a variety of market settings. Marketing scholars have recognized the value of periodically conducting such meta-analyses of accumulated empirical studies of marketing instruments’ effects on sales to
draw out quantitative generalizations useful not only for assessing response parameter estimates made under different circumstances but also for predicting parameter values that should occur under yet-unresearched circumstances (Farley, Lehmann, and Sawyer 1995). In particular, the elasticity of a firm’s sales response to a marketing input, i.e., the percentage increase or decrease in sales for a 1% change in the level of the marketing variable, is an ideal measure for meta-analysis because it is dimensionless and easily interpretable. Quantitative generalizations about elasticities derived from meta-analyses are valuable for both building theory and guiding firms’ marketing decisions (see, Hanssens, Parsons, and Schultz 2001, ch. 8; Farley, Lehmann, and Sawyer 1995). For example, they can provide a benchmark for average market responses under different conditions that can be used with an optimization procedure such as the Dorfman-Steiner (1954) equilibrium to assess the optimality of applied or proposed levels of a firm’s marketing-mix variables in different market settings (Farley and Lehmann 1994, Albers 2000).

Motivated by the above considerations, several notable meta-analysis papers have reported quantitative generalizations about the overall means of firm-level price and advertising-sales elasticities, and determinants of their variations across earlier studies (e.g., Andrews and Franke 1991; Assmus, Farley, and Lehmann 1984; Bijmolt, van Heerde, and Pieters 2005; Sethuraman and Tellis 1991; Tellis 1988). Until now, however, a similar meta-analysis of PS elasticities has not appeared in the marketing research literature. Indeed, quantitative empirical generalizations of any kind about the sales effects of personal selling are sparse in the literature. For example, there is no paper focused on personal selling in Marketing Science’s highly acclaimed special issue on Empirical Generalizations in Marketing in 1995 (see, e.g., Bass and Wind 1995).3

An insufficient number of published studies at the time might explain why there was no meta-analysis research paper focused on PS elasticities in the mid-1980s. In general, data on personal selling efforts and effects have been difficult to obtain, limiting the number of salesforce-focused, market response studies relative to the volume of work on advertising and pricing. However, more data and studies have become available during the past two decades. Still, the only empirical generalizations with respect to PS elasticities are those provided by Hanssens, Parsons, and Schultz, who note that “personal selling elasticities have positive effects on sales, usually with decreasing returns to scale” (2001, ch. 8, p. 348). Further, Hanssens, Parsons, and Schultz (2001) state that “. . . personal communication or sales calling is much more sales effective than advertising” (emphasis ours); it appears they base this assertion on the observation that

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2 Zoltners, Sinha, and their colleagues at the consulting firm ZS Associates, Inc. (ZS) offer some valuable generalizations on sales force effects such as carryover effects, drawn from numerous consulting studies — e.g., Sinha and Zoltners (2001); Zoltners, Sinha, and Lorimer (2006). However, details of the settings and models employed in the individual studies and their meta-analysis are not available because they are proprietary.

3 The extant literature contains several meta-analyses related to behavioral aspects of salesperson performance (Churchill et al. 1985), job satisfaction (Brown and Peterson 1993, 1994), and customer orientation (Franke and Park 2006).
the modal value of PS elasticity found in military recruiting studies is about .5, as compared to the mean estimates of advertising elasticity falling in the range of .1 to .2 found in meta-analyses studies by Lambin (1976), Aaker and Carman (1982), Assmus, Farley, and Lehmann (1984), Sethuraman and Tellis (1991), and Lodish et al. (1995). However, Hanssens, Parsons, and Schultz’s (2001, ch. 8) observations on PS elasticities are based on an informal review of five previous studies, of which four were drawn from defense recruiting in the 1980s, a setting that had typically revealed higher PS elasticities, averaging more than .4, e.g., Sohn (1996). Therefore, there is a need for a systematic research effort of larger scope to develop more robust or “good” empirical generalizations (Barwise 1995) with respect to the magnitude and determinants of PS elasticities. The work presented in this paper attempts to meet this need.

The database for our meta-analysis is comprised of observations from a large collection of empirical studies of personal selling’s effects on sales outputs carried out during the past four decades by scholars in multiple disciplines (marketing, management, operations research, economics, health economics) and by industry- and government-based researchers. The individual studies originate from either the United States or Europe (Belgium, France, Germany, Italy, United Kingdom), and encompass a wide range of known research settings, models, data environments, and estimation methods. Specifically, our database includes 46 publications (studies) — with 5, 10, 11, and 20 papers from the 1970s, 1980s, 1990s, and the current decade respectively — providing a total of 3,193 PS elasticities (see Table 1).

Our meta-analysis is focused on current-period PS elasticities, reflecting the effect of current-period selling efforts on current-period sales output, as the majority of studies in our database provide only these measures.4 Further, we concentrate on firm- or brand-level PS elasticities; no industry-level studies (see e.g., Hanssens, Parsons, and Schultz 2001, p. 350) are included in this meta-analysis. Some of the studies in our database involve personal selling to organizations or institutions, e.g., the selling of high-priced consumer goods to retailers (Beswick and Cravens 1977), the selling of building products to local contractors (Dalrymple and Strahle 1990), and the selling of airline tickets to travel agents (Fudge and Lodish 1977). Others involve personal selling to individuals, e.g., detailing of prescription drugs to physicians (Mizik and Jacobson 2004), or recruiting people to serve in various wings of the U.S. military such as the navy (Carroll et al. 1985) or the army (Kearl, Horne, and Gilroy 1990). (Our database does not include any measurements of the effects of personal selling activity by sales assistants in retail store settings.)

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4 Some studies do provide estimates of the carry-over effect of sales, reflecting the effect of past-period efforts on current-period sales. Our study takes this information into account and provides the estimate of current-period PS elasticity after controlling for the effect of past-period efforts (i.e. lagged or carry-over effects of sales).
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Our research makes the following key contributions: First, we present the distribution of observed PS elasticities from a much larger and more comprehensive set of past studies than those covered in the previous literature. Second, similar to Bijmolt, van Heerde, and Pieters (2005), we identify and quantify the effects of significant drivers of inter-study differences in observed PS elasticities, falling in two classes: (a) product-market (selling environment) characteristics, e.g., product life-cycle stage, buyer type, geographic region, year of data collection; and (b) research methodology characteristics, e.g., data and response model characteristics. Third, after adjusting for the predictable research methodology-induced biases found in our meta-analysis, we determine the mean estimate of PS elasticity over different selling environments to be about .30. We offer this as a benchmark “market-based” estimate of PS elasticity to guide investigations of personal selling–sales response relationships and assessments of the efficiency of personal selling expenditures in different market settings.

The remainder of this paper is organized as follows. In the next section, we present our meta-analysis methodology, the estimation results, and ensuing empirical generalizations with respect to the moderators of PS elasticity. Subsequently, we obtain the methodology bias-corrected distribution of PS elasticities. We then discuss the implications of our results for marketing & sales managers, sales researchers, and military recruiting policymakers. Finally, we conclude with a summary of our findings.

**METHODOLOGY**

**Database compilation and scope**
Table 1 lists the 46 papers (studies) included in our analysis including 13 unpublished papers. The steps for finding and compiling this collection of studies were as follows: First, we examined relevant publications that were cited in earlier reviews of the salesforce models research literature (e.g., Albers and Mantrala 2007; Hanssens, Parsons, and Schultz 2001, ch. 8; Manchanda and Honka 2005; Vandenbosch and Weinberg 1993). We also probed the references in those publications for additional studies reporting PS elasticities. Second, we used all available services for online bibliographic search (e.g., ABI/Inform, EBSCO, Google Scholar, Kluwer Online). Third, we searched the Web for relevant working papers. Finally, we asked researchers for the results of consulting engagements as well as copies of working papers in which they had estimated PS elasticities.
The final database of 46 studies includes only those that provide unambiguous estimates (either directly reported in the study or derived from estimated response model coefficients) of the elasticity of the ultimate output of interest (e.g., sales or market share, number of recruits) to personal selling effort. We excluded studies that use psychological criterion variables such as attitudes or purchase intentions. However, unlike Tellis (1988) and Bijmolt, van Heerde, and Pieters (2005), our database includes studies involving managerial judgment-based sales response estimation because of their prominent place in early salesforce decision modeling research (e.g., the CALLPLAN modeling approach used by Lodish [1971]) and intrinsic ability to provide individual-level elasticities rather than aggregate elasticities (see Albers and Mantrala 2007). As already noted, similar to Bijmolt, van Heerde and Pieters (2005), our database also includes unpublished papers so as to avoid publication bias that would reduce inter-study variability in the meta-analysis (e.g., Assmus, Farley, Lehmann, 1984, p 66).

Ultimately, the 46 studies together yielded a total of 3,193 PS elasticity estimates with the 13 unpublished papers contributing 110, i.e., 3.44% of the total number of observations. Notably, one single study (Fischer and Albers 2007) contributed 2,831 distinct brand-level PS elasticities, i.e., 89% of the total number of observations, while the remaining 45 contributed 362 (about the same total number of price-elasticity estimates utilized in Tellis’ 1988 study and many more than the 128 and 55 advertising-elasticity estimates treated in the meta-analyses by Assmus, Farley, and Lehmann 1984 and Lodish et al. 1995). Noting that meta-analyses based on studies with widely differing numbers of measurements (observations) per study are common, Bijmolt and Pieters (2001) have shown that hierarchical linear model (HLM) estimation (e.g., Raudenbush and Bryk 1992) is the optimal procedure to account for the nested error structure, i.e., at the measurement level and the study level, that is present in such data. Their investigation, however, employed meta-analysis datasets that allowed for a maximum of 19% of the total observations to be contributed by one study. Therefore, to stay within this limit without sacrificing the information provided by the Fischer and Albers (2007) study, we employ a repeated HLM estimations approach in our meta-analysis, wherein each estimation run uses only a small, randomly drawn sample of the Fischer and Albers (2007) PS elasticity measurements combined with the remaining data from the 45 other studies. The details are provided in a later section.

**Independent variables included in the meta-analysis and coding**

Table 2 presents the coding scheme for each of the selected independent variables, i.e., determinants of inter-study differences in PS elasticity estimates, examined in our meta-analysis, classified as either a market characteristic or research methodology characteristic. As indicated in Table 2, our selection of each of these independent variables was based on the use of a similar variable in one or more of the earlier published meta-analyses of price elasticity (Bijmolt, van Heerde, and Pieters 2005; Tellis 1988), advertising elasticity (Andrews and Franke 1991; Assmus, Farley, and Lehmann 1984) and determinants of a salesperson’s performance (Churchill, Ford, and Walker 1985). However, due to the sales force context of our research, our operationalizations (as indicated in Table 2) differ somewhat from those of the similar independent variables used in previous meta-analyses. Table 2 also indicates our a priori hypotheses with
respect to the expected sign of the effect of each independent variable on the observed PS elasticities. The rationale for each hypothesized sign is discussed, along with the empirical results in a later section. Two judges who were not members of the meta-analysis research team separately coded all the studies on the selected independent variables, using the coding scheme in Table 2. Agreement between the two judges was assessed to be greater than 90%. A third judge amicably resolved any remaining inconsistencies.

<table>
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<tr>
<th>#</th>
<th>Type</th>
<th>Variable</th>
<th>Description</th>
<th>Precedence</th>
<th>Coding Scheme</th>
<th>Expected Direction of Effect</th>
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<td>Year of data collection</td>
<td>Earliest year in the panel from which PS elasticities were estimated</td>
<td>AF, BHP</td>
<td>Mean centered variable</td>
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<tr>
<td>2</td>
<td>MC</td>
<td>Stage in product lifecycle</td>
<td>Captures whether the product was in the growth or mature stage of its product lifecycle.</td>
<td>AF, BHP, T</td>
<td>1: New or growing markets, 0: Mature or declining markets</td>
<td>New &gt; Old</td>
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<td>3</td>
<td>MC</td>
<td>Geographic setting</td>
<td>Continent from which data were collected</td>
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<td>Europe &gt; North America</td>
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<td>4</td>
<td>MC</td>
<td>Type of buyer</td>
<td>Captures whether the recipient of the sales call is an institutional or individual buyer, e.g., industrial products are sold to institutional buyers, whereas Navy recruiting efforts are targeted at individuals.</td>
<td>CFHW</td>
<td>1: Nonorganizational buyers, 0: Organizational buyers</td>
<td>Organizational &gt; Nonorganizational buyer</td>
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<td>5</td>
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<td>Estimation method</td>
<td>Captures whether the estimation method used was Ordinary Least Squares(OLS), Multi-stage and Generalized Least Squares (MLS), Maximum Likelihood (MLE), or Decision Calculus (DC)</td>
<td>AF, AFL, BHP, T</td>
<td>1: MLS, 0: OLS, 1: MLE, 0: OLS, 1: DC, 0: OLS</td>
<td>?</td>
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<td>6</td>
<td>RM</td>
<td>Temporal aggregation</td>
<td>Captures the smallest data interval used</td>
<td>AF, AFL, BHP, T</td>
<td>1: Quarterly, 0: Monthly, 1: Yearly, 0: Monthly</td>
<td>Quarterly &lt; Monthly, Yearly &gt; Monthly</td>
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<td></td>
<td>RM</td>
<td>Functional form</td>
<td>Captures whether the response function is a constant-elasticity (e.g., multiplicative) or a varying elasticity form (e.g. ADBUDG)</td>
<td>AF, AFL, BHP, T</td>
<td>Varying Elasticity (V) (NL), Constant Elasticity (C)</td>
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<td>RM</td>
<td>Sales output measure</td>
<td>Captures whether the output is measured in absolute or relative (share) terms</td>
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<td>Relative, Absolute</td>
<td>Relative &lt; Absolute</td>
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<td>Heterogeneity in sales response</td>
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<td>RM</td>
<td>Lagged measures</td>
<td>Captures whether lagged effects of sales/effort were included</td>
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<td>Omitted variables</td>
<td>Captures whether the variables of price(p), quality(q), advertising(a), and promotions(pr) were included or excluded</td>
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**Estimation methodology**

We model PS elasticity as a linear function of the selected independent variables (moderators), similar to Tellis (1988) and Bijmolt, van Heerde, and Pieters (2005). As already mentioned, our meta-analysis is based on multiple HLM estimation runs using samples of the Fischer and Albers (2007) observations along with the other studies’ data in each run. More specifically, the steps in our procedure were as follows:

**Step 1:** We classified the 2,831 products for which elasticity estimates were obtained in the Fischer and Albers study into 12 broad, mutually exclusive and exhaustive therapeutic product categories.

**Step 2:** We then drew a stratified random sample of 7 observations from each of the 12 product categories, i.e., a total of 84 elasticity measurements from the Fischer and Albers study, and combined them with the 362 measurements from the remaining studies to obtain a total of 446 observations. Thus, the number of observations drawn from the Fischer and Albers study was about 19% of the observations for each run.
**Step 3:** The HLM model was estimated using a total of 446 observations. After each run, we recorded the estimated size, sign, and statistical significance of the impact of each moderator (*market and research methodology characteristics*) on PS elasticity.

**Step 4:** Steps 2 and 3 were repeated 2,000 times.

The computed means of the estimates (from Step 4) are reported in Table 3. Table 3 also provides the standard deviation of the estimates across the 2000 iterations which indicate that the estimates of each moderator were very similar in magnitude (e.g., the standard deviation of the product life cycle estimate was .001). Also, the sign of each estimated effect was unchanged across all the 2,000 iterations. Last, we counted the times each moderator’s effect on elasticity was found to be statistically significant (i.e., \( t \)-value > = 1.65, one-sided test). We then treated the mean estimate of each moderator’s effect on PS elasticity as significant if it was significant in 90% or more of the 2,000 iterations.

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<th>% Times Significant (p &lt; .1)</th>
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</table>

**Robustness Checks**

We performed five checks to ensure the robustness of our results. First, we performed our estimation with and without the data from the Fischer and Albers (2007) study and found that all the estimates’ signs and magnitudes were very similar in both
cases. Second, instead of 7 draws from the 12 product categories in the Fischer and Albers study (Step 2 in our estimation), we drew 2, 3, 4, 5, 6, 8 and 9 observations and performed repeated estimations. We found the same substantive conclusions regarding the estimates. This suggested that our results were robust to the number of draws from the Fischer and Albers (2000) study. We retained 7 as the number of draws since this allowed one study to contribute 19% of the observations (7 x 12 = 84; 84/446 = 18.8%), which allows HLM estimates to remain robust (Bijmolt and Pieters, 2001). Third, since the author Albers contributed a number of studies to the total of 46, we created an author specific dummy variable to see if estimates obtained in the Albers studies were significantly different from those obtained from the other studies. We found no significant effect and hence report the results of HLM estimation runs that did not include this dummy variable. Fourth, as recommended by Assmus, Farley and Lehmann (1984), we included unpublished studies in our database. We created a dummy variable to check whether PS elasticities from unpublished studies were significantly different from those reported in published studies. We found that unpublished/working papers reported elasticities that were significantly lower than published studies; hence the results we report are based on the estimation of the model that retains this dummy variable.

Lastly, as there is no direct diagnostic for multicollinearity in HLM, we observed the variance inflation factors (VIF) of the independent variables (e.g., Mason and Perreault [1991]) obtained through OLS regressions. Specifically, we ran three OLS regression of PS elasticity on (a) covariates that changed only within a study; (b) covariates that changed only across studies; and (c) all covariates. In each of these cases, the VIF of each covariate was less than 5, suggesting acceptable collinearity.

Next, we report the results of our analysis.

Figure 1: Histograms of Elasticities

Panel A. Histogram of Observed Raw Personal Selling Elasticities
RESULTS

Frequency distribution of observed PS elasticities

Figure 1 (Panel A) displays the overall frequency distribution of the 3,193 observed PS elasticity estimates obtained from the 46 studies. As expected, we see that 98% of these elasticity estimates are positive. Next, we calculated the weighted mean of the elasticities to allow every study to contribute equally to the empirical generalization obtained. Specifically, if \( N \) represents the total number of studies (i.e., 46) and \( M_n \) represents the mean of all the PS elasticity estimates obtained in study \( n \) (where \( n \) ranges from 1 to \( N \)), then the weighted mean = \( \sum_{n=1}^{N} \frac{M_n}{N} \). We found the “raw” weighted mean in our database (unadjusted for any methodology-induced biases) to be .32. Notably, this value from our meta-analyses is significantly lower than .5, the modal value of PS elasticity suggested by Hanssens, Parsons, and Schultz (2001, ch. 8, p. 348).

HLM model estimation results

The overall fit of our model to the data (mean \( R^2 \) across 2,000 iterations = .35) is satisfactory considering that we are using our model for descriptive purposes, and also comparable to the model fits obtained in earlier meta-analyses (e.g., .16 in Bijmolt, van Heererde, and Pieters 2005, and .29 in Tellis 1988). 10 of the 18 covariates (three market characteristics, and seven research methodology characteristics) were found to have significant effects on the estimated PS elasticity. We report and discuss the estimated effects of the various independent variables below.
Effects of market characteristics

Year of Study

Our analysis indicates that PS elasticities appear to have decreased by about .01 each year in the time frame of study. In general, this observation is consistent with the lengthening of sales cycles in recent years, involving more relationship selling and partnering activities, and attributable to increasing product complexity, more demanding customers, and greater competition (e.g., Jones et al. 2005; Weitz and Bradford 1999). Simply put, more effort is being required to produce the same level of sales. Also, in recent years, which have been marked by increased military engagements, more effort is being required of military recruiters to enlist the same number of quality recruits each year. The Army National Guard, in fact, has missed its recruiting goal by at least 13% each year between 2003 and 2005 (Congress of the United States, 2006).

Product Lifecycle Stage (Early [introduction, growth] Stage versus Late [maturity, decline] Stage)

We expected the estimated PS elasticity to be higher in study settings involving products in the early rather than late stages of their lifecycles (see Table 2). Personal selling’s key advantages relative to other marketing instruments, e.g., media advertising and direct marketing, are that it permits two-way communication between buyer and seller that can address the former’s questions and objections and offer demonstrations. In the case of pharmaceutical marketing, physicians are more willing to meet with sales representatives when the reps have something new to show them. That is, sales calls for new drugs are more informative and persuasive, resulting in higher average PS elasticity values in the launch phase than those in the later stages of the lifecycle. In the late stage, details play a largely persuasive role (Narayanan, Manchanda, and Chintagunta 2005). More generally, there is much evidence for the influential role of personal selling in successful new product marketing (e.g., Cooper and Kleinschmidt 1988), especially high search, infrequently purchased products (e.g., Hagerty, Carman, and Russell 1988). The related adjustments in sales management practices such as new product-focused sales training and a shift from sales to activity quotas — e.g., number of demonstrations, joint sales calls by sales reps and managers, etc. — at the time of new product launches also contribute to higher sales force effectiveness in those situations (Wotruba and Rochford 1995; Zoltners, Sinha, and Lorimer 2006). As expected, we found a statistically significant main effect for the influence of product lifecycle on estimated PS elasticity. Specifically PS elasticities for products in the early stages of their lifecycles are on average about .08 greater than those of products in later stages of their lifecycles.

Geographic Setting—United States versus Europe

There are two reasons for our expectation that the estimated PS elasticity would be lower in U.S. sales settings than in European sales settings. First, there is more saturated sales coverage (with lower marginal response to effort) in the U.S. pharmaceutical market, e.g., detailing expenditures in the United States have been reported to be three to four times larger than in Europe (Chintagunta and Desiraju 2005). Second, there are a number of cultural differences between the two settings. Prior work has shown that collectivistic cultures have a more favorable view of personal selling than individualistic cultures, due to their predispositions toward mutual learning, caring attitude, and respect
The European countries are generally reputed to be more collectivistic than the United States (Schlegelmilch and Robertson 1995). Indeed, our meta-analysis finds PS elasticities in the United States to be .37 lower than those in Europe. This is similar to the finding in Farley and Lehmann (1994) and Assmus, Farley, and Lehmann (1984) with respect to advertising elasticity.

Type of Buyer—Institutional vs. Individual

In their meta-analysis of the determinants of a salesperson’s performance, Churchill et al. (1985) found that the relationship between a salesperson’s performance outcomes and effort differs between settings involving institutional buyers and those involving individual customers. Previous research has shown the high importance of the sales force in industrial marketing contexts (e.g., Jackson, Keith, and Burdick 1987; Moriarty and Spekman 1984; Parasuraman 1981). For example, Jackson, Keith, and Burdick (1987) note, in general, industrial buyers consider salespeople to be the most important promotional element when making a purchase decision. Additionally, products are reordered quite frequently in an organizational setting, and many firms have well-established and straightforward repurchasing policies that do not involve as much work by the salesperson compared to the first purchase (Dwyer and Tanner 2002, p. 72). We hypothesize that this could generate a higher amount of sales for the same amount of effort and hence lead to a higher estimate of PS elasticity. However, while the sign of the effect of a change in setting from individual to institutional-buying is positive, we do not find that this effect is significant. One possible explanation is that there are more institutional-buying settings in our database involving new or modified rebuys, rather than routinized repurchases, leading to longer sales cycles (see, e.g., Anderson, Chu, and Weitz 1987). Industry reports indicate that some business-to-business sales cycles can be 10 to 18 months long due to the complex nature of the product requirements, company-mandated procedures, and multiple decision makers at many levels of management (Whetsel, 2005).

Research methodology, data, and model characteristics

Temporal Aggregation

Earlier work has shown that aggregation loses much of the temporal component of elasticity stemming from short-term variations in the marketing instrument, thereby leading to a lower estimated elasticity. For example, Assmus, Farley, and Lehmann (1984, p. 71) find that advertising elasticities estimated with yearly data are lower than those estimated with bimonthly or quarterly data. We sought to investigate whether temporal aggregation could similarly result in biased estimates of PS elasticities. We can expect temporal variations in both sales effort and sales similar to advertising (e.g., Gopalakrishna et al. 2007; Lal and Srinivasan 1993; Steenburgh 2004), due in part to the common use of nonlinear incentive mechanisms such as short-term (typically monthly or quarterly) sales quota-based lump-sum bonus plans in practice (e.g., Joseph and Kalwani 1998; Mantrala, Raman and Desiraju 1997). This temporal variation will not be picked up in aggregated data; therefore we expected PS elasticities estimated from yearly and quarterly data to be lower than those estimated with monthly data.
Consistent with our expectation, we find PS elasticities estimated with yearly data to be .21 lower than those estimated with monthly data. However, contrary to our expectation, we find no statistical difference between estimates of PS elasticity obtained using monthly and quarterly data. Based on recent propositions established by Tellis and Franses (2006, pp. 221–222), our finding would suggest that the average unit exposure times (or time between successive sales calls) of customers to personal selling in our database falls in this range.

Varying versus constant elasticity functional forms

We divided response functions into two broad categories, varying-elasticity form (e.g., S-shaped) and constant-elasticity (i.e., multiplicative or double-log) form. We expect elasticities estimated using varying-elasticity response functions to be higher than those from multiplicative functions, because, as the name states, constant-elasticity functions constrain short-term elasticity to be the same over the range of the response function. As pointed out by Assmus, Farley, and Lehmann (1984), such models are likely to underestimate elasticities that are substantially smaller than 1 in magnitude (as is the case with observed PS elasticities) compared to models that allow for varying elasticity over the response function. As expected, we find that the use of a varying-elasticity functional form leads to an elasticity that is .17 more than the use of the more restrictive constant-elasticity form.

Relative versus Absolute Sales Criterion Measure

We hypothesize that estimated PS elasticities from models using relative sales (or market share) as the criterion measure should on average be smaller than those estimated from models using absolute sales as the criterion measure. This is because the latter is a measure of change in sales due to both primary (market expansion) and secondary (share expansion) changes resulting from varying selling effort (see, e.g., Hagerty, Carman, and Russell 1988). Moreover, the share-based elasticities classify only a portion of the market expansion as primary demand (Steenburgh 2007). Consistent with this rationale, we find that relative PS elasticities are .22 less than absolute PS elasticities.

Lagged Effects Included versus Lagged Effects Excluded

The accumulated PS literature shows that much of the sales level observed in one period may be due to carryover effects of efforts in previous periods. For example, Horsky and Nelson (1996) find a large carryover in the sales of chemical production equipment. Similarly, based on salesforce studies at 50 pharmaceutical companies, Sinha and Zoltners (2001) report that the aggregate sales carryover from selling effort in one year is 75%, 80% the next year, 62%–78% the year after, and 52%–70% in the fourth year. Sinha and Zoltners attribute these high levels of carryover to physicians’ prescriptions for chronic-care drugs and reluctance to switch if the drugs are effective. In the case of army recruiting, recruiters are known to simply draw from an inventory of leads they have built up in earlier periods rather than make fresh calls, as a “demotivation stage” sets in toward the end of their contracts (Carroll, Lee, and Rao 1986). Therefore, the effectiveness of current-period recruiting efforts would be overstated if the number of lagged leads is omitted from the response model.
Thus, we hypothesize that the inclusion of lagged effects (sales or effort) should result in a lower estimated (current-period) PS elasticity. Our results indicate that PS elasticities are smaller by .17 when lagged effects are included, compared to when they are omitted.

Adverting Included versus Advertising Not Included

Firms often use both advertising and personal selling together to form an integrated marketing-communications strategy. Advertising can contribute to higher levels of selling efficiency (Hutt and Speh, 2004, p 412). However, reaching a prospect via advertising can cost less than a dollar while an industrial sales call can cost a few hundred dollars (Gopalakrishna and Chatterjee, 1992). Since buyers are known to go through several stages of decision-making before actually making a purchase (e.g. Robinson et al. 1967), marketers are known to use impersonal communication media like advertising to build awareness, create leads, and ‘set up’ the sales call which can eventually convert a lead. Given that advertising complements personal selling in this manner and does indeed have a positive impact on sales (e.g. Assmus, Farley, and Lehmann, 1984), we hypothesize that omitting advertising from a sales response model in a marketing setting that employs personal selling should bias the PS elasticity upwards. Our estimation results show that the omission of advertising leads to a PS elasticity biased upward by .14.

Promotions Included versus Promotions Not Included

We hypothesize that the inclusion of promotions (e.g., free samples, gifts, and temporary price reductions) in the sales response model would have a negative impact on PS elasticity estimates. This is because, if promotions are omitted in the settings where they are known to have a significant effect on sales, the estimate of the effectiveness of personal selling obtained would be inflated. Some of the studies where promotions have been omitted from our database include those involving pharmaceutical selling (Berndt, Pindyck, and Azoulay 2000), ad-space selling (Mantrala et al. 2007), and industrial product selling (Turner 1971). Among these, the omissions of promotions in response-model estimations involving pharmaceutical detailing and ad-space selling—where they are known to be effective and are frequently used—would contribute to upwardly biased PS elasticity estimates. Our estimation results show that the omission of promotions leads to a PS elasticity biased upward by .10.

Unpublished vs. Published Papers

Previous studies in marketing have suggested the inclusion of unpublished as well as published papers while performing a meta-analysis, e.g., Assmus, Farley and Lehmann (1984) state that “the inclusion of results from rejected papers or from industry sources would be very desirable in the future”. The goal is to reduce publication bias, i.e., the tendency of researchers to not submit and/or journals to not publish papers with “weak,” e.g., statistically insignificant or implausible findings (see also Rust, Lehmann, and Farley 1990). When only published studies are included in a meta-analysis, inter-study variability is reduced and mean estimates can be biased upward. Therefore, similar to Andrews and Franke (1991), Bijmolt, van Heerde and Pieters (2005), we included unpublished papers in our database. To substitute the discovery process for the “predisposition of reviewers” (Andrews and Franke, 1991, p 83), we defined a dummy
variable that captured whether a study was unpublished. We found that unpublished studies reported elasticities that were .237 lower than published studies.

Comments on non-significant research method characteristics

We hypothesize that the omission of a relevant influencer of sales will result in a PS elasticity biased in the same direction as that of the influence. Thus, since quality could result in increased sales, omitting it should technically result in a PS elasticity biased upward. Similarly, if customers are very price sensitive in a setting, omitting price in the estimation should lead to a PS elasticity biased downward. However, although the effects of these omitted dummy variables have the right sign, we find they are not significant. This does not imply that quality and price have no impact on sales but rather within the context of our study’s sample sizes and statistical power, we are unable to document an impact. It is also possible that the studies in our database which omitted these instruments did so because they tend to stay fixed over long time horizons in those settings, e.g., prescription drug and military recruiting markets.

We also included two other moderators in our analysis due to their precedence and relevance in other elasticity meta-analyses — accounting for heterogeneity in sales response and choice of estimation method. Our results show that PS elasticity estimates are not biased in any particular direction when response models do not account for heterogeneity, although buyers are likely to be different in terms of their sensitivities to personal selling efforts for any number of reasons. This finding is in keeping with past theoretical work that shows that elasticities increasing or decreasing with heterogeneity depends on the distribution of heterogeneity (Hutchinson, Kamakura, and Lynch 2000) and is consistent with previous empirical research that has not found directionally consistent effects of ignoring heterogeneity on price elasticities, e.g., Chintagunta (2001); Ailawadi, Gedenk, and Neslin (1999); Bijmolt, van Heerde, and Pieters (2005). Similarly, we find that the choice of OLS (Ordinary Least Squares), MLS (Multi-Stage Least Squares), MLE (Maximum Likelihood Estimation), or DC (Decision Calculus) as an estimation method does not bias the PS estimate one way or the other. In theory, the choice of OLS as an estimation method when recursive or simultaneous systems are truly generating the data will lead to biased estimates compared to MLS (or MLE if the simultaneity is modeled). However, similar to Assmus, Farley, and Lehmann (1984) and Tellis (1988), we do not find bias in any particular direction.

Research methodology bias-corrected benchmark PS elasticity from published studies

Following the lead of Tellis (1988, p. 337), we propose that rather than the raw weighted mean of .32, a more appropriate generalized estimate to take from this meta-analysis for future research purposes (e.g., use as priors in Bayesian estimation procedures) and practical applications is the weighted mean obtained after correcting each individual PS estimate for the statistically significant biases introduced by researchers’ methodology choices. Specifically, according to our results reported in Table 3, a study that omitted the promotion variable in the response model would report a PS elasticity that is biased upward by .10 and one that omitted the advertising variable would report a PS elasticity that is biased upward by .14. Similarly, studies that use data aggregated at a yearly level would report selling elasticities that are lower by a factor of
.21 than those that utilize data aggregated at the monthly level. Next, the PS elasticity estimates from studies that used constant-elasticity functional forms would be biased downward by a factor of .17 compared to PS elasticity estimates from studies using varying elasticity functional forms. Also, PS elasticity estimates from studies that omitted lagged effects would be biased upward by a factor of .17 compared to those derived from models that included lagged effects. Based on these findings, we propose that the appropriate reference sales response model for assessing PS elasticity is one that includes advertising, promotion, lagged effects, allows for varying PS elasticity, and uses monthly rather than yearly data intervals (considering that the unit exposure time in personal selling is closer to a month than a year). We then proceed to “correct” each of the 3,193 measurements in our database for their deviations, if any, from this reference model. Such corrections for methodology-introduced biases yield the distribution of personal selling elasticities shown in Figure 1 (Panel B). The remaining variation across the studies’ methodology bias-corrected elasticities is now attributable to only differences in the study settings’ market characteristics. Notably, the weighted mean of the methodology bias-corrected elasticities in our database is about .30 (see Figure 1, Panel B).

As we discuss in the next section, combined with earlier price and advertising elasticity meta-analysis results, this market-based benchmark value of PS elasticity can serve as a useful input for marketing & sales managers, sales researchers, and military recruiting policymakers.

IMPLICATIONS

Implications for managers

Marketing spending efficiency reviews

Previous papers have noted how generalized estimates of elasticities from empirical marketing meta-analyses can be used with Dorfman-Steiner (1954) equilibrium conditions to assess the efficiency of applied or proposed marketing expenditure levels in different market settings (Farley and Lehmann 1994, Albers 2000). Specifically, the Dorfman-Steiner (DS) theorem provides two conditions that marketing expenditures aimed at maximizing profits should satisfy: Everything else held constant, (1) the percentage of personal selling (advertising) spending with respect to the marginal revenue should be equal to the personal selling (advertising) elasticity divided by the price elasticity (assuming the unit selling price is set optimally relative to unit production cost); and (2) for firms that rely on both advertising and personal selling efforts to drive sales, the efficient ratio of their personal selling to advertising expenditures should be equal to the ratio of their elasticities.

Thus, the first DS condition implies \( \frac{PS_S}{R} = \frac{-PS_E}{PE} \) where \( PS_S \) denotes personal selling spending; \( PS_E \) is the personal selling elasticity; \( R \) denotes revenues; and \( PE \) represents the price elasticity. Then employing the mean estimate of price elasticity of about \(-2.8\) (applicable to the period 1998-1999) delivered by Bijmolt, van Heerde, and Pieters (2005, Table 3) and our bias-corrected estimate of .30 for PS elasticity (also applicable to the 1998-1999 period), the Dorfman-Steiner (1954) theorem condition implies the efficient ratio of personal selling expenditures to total revenues (assuming
prices are set optimally) is about 11%. This benchmark ratio could be used as a starting point by firms to assess the efficiency of their own as well as their industries’ average $PS_S/R$ ratios that appear in trade reports (e.g., see Table 1.2, Zoltners, Sinha, and Lorimer 2004).

The second D-S condition implies $PS_S/A_S = PS_E/A_E$ where $A_S =$ advertising spending and $A_E =$ advertising elasticity. Thus, based on our meta-analysis estimates of .30 for PS elasticity, and considering the mean advertising elasticity estimates falling in the range of .1 to .2 from previous meta-analyses (see Hanssens, Parsons, and Schultz 2001, pp. 328–329), on average, marketing communications managers should set personal selling spending at about two times the amount of advertising spending. This prescription is corroborated by existing practice; e.g. Reibstein, Joshi, and Farris (2004) infer from several secondary data sources such as PIMS, the Labor Bureau and COMPUSTAT, that sales force spending today is two to three times that of advertising media spending.

The D-S theorem-based ratio guidelines emerging from meta-analysis findings, of course, can and should be refined to account for specific market settings. Our findings with respect to the effects of specific market characteristics on the estimates of personal selling elasticity can be used to make these further adjustments in the benchmark ratios. Targeting product-markets for personal selling efforts: Our meta-analysis results indicate that responsiveness to selling effort is high in new product introductions while PS elasticity is lower in sales of older products. This suggests that managers should deploy direct sales force resources for launching and establishing new products while shifting to other means of communications as products mature, e.g., e-detailing (electronic detailing) in the case of older, well-known pharmaceuticals. Similarly, shifting more personal selling resources from the U.S. to European markets seems desirable for multinational firms. As has been shown earlier, improved allocations of selling efforts across product portfolios and geographic areas can often deliver higher profits at lower than current investment levels (e.g. Mantrala, Sinha, and Zoltners 1992).

Implications for sales force researchers

Researchers conducting empirical model-based studies of market response to various marketing efforts often refer to generalized estimates of effects from meta-analyses to check on the plausibility of their own findings. For example, Chintagunta and Desiraju 2005, (p 76) use the magnitude of advertising elasticity to support their estimate of PS elasticity, apparently because a ‘good’ empirical generalization (e.g., Barwise 1995) with respect to PS elasticity was not available at the time of their study. The market-based generalized estimate for PS elasticity we have derived in this study can now serve as a more appropriate benchmark for such validation checks. Also, as data environments have become richer and more disaggregate in nature, the sophistication of econometric models used to assess the effects of marketing variables such as personal selling has grown. However, the estimation of these models has become increasingly time-consuming, e.g., Narayanan, Desiraju and Chintagunta (2004, p96 footnote 15) report that their model parameter estimation could take several hours. In such situations that involve running numerical optimization algorithms (e.g. maximum likelihood estimation) to obtain

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estimates of personal selling effects, our meta-analysis estimate of PS elasticity can serve as a reasonable starting value and thereby save researchers some valuable computation time.

Further, our meta-analysis shows that estimates of PS elasticity can be inflated by the omission of lagged effects, advertising, and promotion variables, and underestimated with the use of constant elasticity models and high temporal aggregation. Therefore, to obtain less biased results in future sales force response studies, researchers and analysts are well-advised to include lagged effects, advertising, and promotion variables, use varying elasticity functional forms, and monthly or quarterly data intervals which correspond more closely to the unit exposure times (i.e., times between successive calls on customers in field settings) that obtain in many sales force settings. However, in those situations where the researcher/analyst does not have all the required data, our meta-analysis findings can help to adjust the estimate of PS elasticity that is obtained for the “predictable method-induced-biases” (Tellis, 1988).

Implications for military recruiting policymakers
Since the abolishment of the mandatory draft, U.S. military recruiting has depended heavily on personal selling efforts of recruiters to meet its targets (e.g., Hanssens and Levien 1983; Warner et al. 2003). However, Congressional Budget Office reports indicate that the Army fell short of its recruiting goals by 8% in 2005. How many more recruiters are needed to make up the shortfall? The desired percentage increase in the number of recruiters is equal to the desired percentage increase in recruits divided by the PS elasticity. With a PS elasticity value of 0.30, the appropriate increases in the number of recruiters for the active Army in the year 2006 should have been approximately 27%. To reduce their shortfall in recruits, the active Army did in fact increase their recruiter strength in 2006 but by only 10%. Apparently, they acted on the assumption that the PS elasticity was much higher than .30, if budgets were not constrained.

CONCLUSIONS
Farley, Lehmann and Sawyer (1995) note that “...the prime benefit of meta-analysis in marketing has been that, with judicious use, it has delivered generalized quantitative estimates of such important measures of price and advertising elasticities...” However, despite its prominence in many companies’ marketing budgets, the literature until now has not offered any good empirical generalizations with respect to personal selling elasticity. The primary contribution of this research is that it fills this glaring gap in the empirical marketing generalizations literature.

Our meta-analysis reveals that the mean PS elasticity is still significantly higher than that of advertising elasticity. Thus, personal selling remains a relatively potent marketing instrument that plays a key role in the marketing mix of many industries. This finding underscores the continuing importance of research in marketing focused on improving sales force productivity. We hope the findings in this paper serve as a useful reference for future research in this domain.
REFERENCES


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“ALL SMILES ARE NOT PERCEIVED EQUAL.” CUSTOMERS’ RESPONSES TO EMPLOYEES’ AFFECTIVE DISPLAY AT DIFFERENT SERVICE ENCOUNTERS

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“A professional acts as they must, not as they feel.” (Pugh, 2001, p. 1)

“…the authenticity of the emotional display by frontline staff and the sincerity with which staff interacts with customers may be much stronger drivers of service outcomes than policies that require people to smile at any cost but do not provide them with the tools to create and display seemingly real emotions when they serve customers.” (Hennig-Thurau, Groth, Paul, & Gremler, 2006, p. 70)

The direct interaction with customers at various service encounters is one of the most challenging and intensive issues facing service providers to distribute quality service. In marketing practices, frontline employees’ positive emotional display has long been encouraged as an essential means to gain competitive advantage. However, empirical research about customers’ responses to employees’ affective display (EAD) has emerged only in recent years. Previous research shows that positive EAD has become a key strategic variable in organizations’ efforts to improve customer satisfaction (Hennig-Thurau et al., 2006) and their future behavior intentions (Tsai & Huang, 2002). This positive association between EAD and service outcomes is a robust finding across disciplines. However, existent studies hold conflicting perspectives about the mechanisms underlying this relationship, providing inconsistent guidance for marketing practice. The first research perspective (Rafaeli and Sutton, 1987; Pugh 2001) insists that smiles need to be displayed, whether they are authentically felt or not. The second perspective (Grandey, Glenda, Anna, Karen, & Lori, 2005; Hennig-Thurau et al., 2006) suggests that simply requiring service employees to display positive emotions as part of their job description may not lead to desired service outcomes. It is more effective to facilitate changes in employees’ internal affective states and recommend the display of authentic feelings.

Taking a reconciliatory view of these conflicts in previous findings, our research attempts to provide an understanding of factors that moderate EAD effects on service outcomes. Our model builds on the premise that customers’ perception and evaluation of employees’ affective display depend on their motivation, opportunity and ability to judge the EAD cues, which is further determined by specific encounter types and customer/employee group membership. We propose that all smiles are not perceived equal. Simply serving with a smile is fine at certain encounters, but may backfire at others.

Our attempt to clarify EAD effects at different service encounters is critical, not just because of our contribution to the EAD literature by covering new theoretical ground, but also because it provides more consistent directions for marketing practice. After all, the
organizational requirement and reinforcement of expressing certain emotions at the workplace may result in employees’ emotional dissonance, job dissatisfaction and turnover behavior (Alicia, 2003), and the training and management of EAD authenticity at work place is very difficult and expensive (Richard, 2005).

In this paper, we begin with an overview of the role that EAD plays in influencing service outcomes and discuss the conflicting findings in existent literature. Then we propose two factors—service encounter types and customer/employee group memberships—as moderators of EAD effects in different conditions. We test our predictions in two controlled experiments. Finally, we will discuss the theoretical and practical implications of our findings.

LITERATURE REVIEW

Employee Affective Display as Part of the Work Role

Service employees’ affective display (EAD), also called “employee affective delivery” (Tsai & Huang, 2002), refers to “the act of expressing socially desired emotion during service transactions (Ashforth & Humphrey, 1993, pp. 88-89).” As part of their work role, service employees are almost always expected to express certain emotions at their work places, such as friendliness and warmness for flight attendance (Hochschild, 1983), good cheers for Disney employees (Van Maanen & Kunda, 1989) and convenience store clerks (Sutton & Rafaeli, 1988).

The components of positive EAD include greeting, thanking, speaking in a rhythmic vocal tone, smiling, and establishing eye contact (Pugh, 2001; Tsai & Huang, 2002). Recent research on EAD effects (Barger & Grandey, 2006; Grandey et al., 2005; Hennig-Thurau et al., 2006) focuses on the extent of smiling behavior—the upward twist of the lips, which is most representative component of the emotional display. For example, the strength of a smile is dependent on the exposure of teeth (Barger & Grandey, 2006); the frequency of smiles is measured by how many smiles were displayed per minute (Hennig-Thurau et al., 2006). In our research, EAD positivity refers to the frequency and strength of the smiling behavior. When the EAD positivity is high, the service provider display frequent and stronger smiles; when the EAD positivity is low, the service provider show infrequent and weak smiles.

Moreover, emotional labor theory (e.g., Grandey 2003) predicts that service employees are expected to adjust their displayed emotions with organizationally desired emotions through their choice of two strategies. When the internal feelings are inconsistent with the social norms, service providers could either fake the displayed unfelt emotions (surface acting) or modify their internal, true affective states to the expected emotions (deep acting). Therefore, there are generally two dimensions of positive EAD: the positivity of employee emotional display (i.e., the frequency of displaying EAD components) and the authenticity of the emotional display (i.e., EAD from surface acting or deep acting).
Emotional Contagion Framework and Conflicting Empirical Evidence

The mainstream EAD research is based on emotional contagion framework (Barsade, 2002; Hatfield, Cacioppo, & Rapson, 1992, 1994), which attempts to explain how emotions are transmitted and shared among people in social interactions, and how one’s perceiving and interpreting another person’s emotions affect the communication outcomes. Empirical studies show that emotional contagion can occur at both subconscious and conscious levels. In primitive emotional contagion, individuals are inclined to automatically mimic and synchronize their facial expressions, vocalizations, and movements with those of another person and, consequently, to converge emotionally. At a more conscious level, emotional contagion can contain elements of purposeful processing (such as expectation, interpretation and evaluation) as social comparison processes between people.

The key conflicts in previous empirical studies lie in the mechanisms linking the relationship between EAD and service outcomes. According to mood mechanism, EAD influences customer satisfaction by changing customers’ positive affect during the service. In the first type of mood mechanism—primitive emotional contagion, customers may mimic and synchronize employees’ displayed positive emotion. Pugh (2001) found that employees’ internal affective state was not related to the displayed emotions at the service encounter; only the emotional expressiveness (i.e., the ability to express emotions nonverbally) was positively associated with EAD affecting customers’ positive mood and service outcomes. Based on observational data, Barger and Grandey (2006) provide evidence of the mimicry effect—employees’ smiling behavior may influence customers’ smiling behavior during the service. Hence, highly positive EAD (i.e., the more frequent and stronger smiles) may better facilitate the automatic, unconscious emotional contagion process, leading to more favorable service outcomes.

Figure1: Type 1 Mood Mechanism: Primitive Emotional Contagion

The second type of mood mechanism refers to the conscious emotional contagion process. Hennig-Thurau et al. (2006) argued that the main drive for customers’ positive affective response is authenticity of emotional display, and the amount of employee smiling has no significant effect on customers’ affective state changes or customer satisfaction. The authors’ explanation for the advantages of authentic smiles is twofold. First, social psychological literature on Duchenne (i.e., authentic) smiles by Ekman and his colleagues shows that authentic smiles stimulate more positive emotional reactions than fake smiles because of neurological reasons. The subtle facial cues associated with authentic smiles (e.g., the symmetry of the smile or the activation of certain muscle
groups around the eyes) lead to more positive responses in observers. Second, without detailed reasoning, the authors suggest that “…employees summon true and genuine emotions from within and thus display positive emotions to customers that are authentic, enabling those customers to adopt the employee’s emotions consciously—that is, to use the employee’s displayed emotions as a type of social information to reduce the ambiguity associated with the service experience (Hennig-Thurai et al., 2006, p. 61).” Hence, an inauthentic smile is less effective in changing customer positive affect because it is less likely to reduce the service-related ambiguity. Therefore, their empirical finding that EAD positivity (i.e., the extent of employee smiling) has no impact on changes in customer positive affect or customer satisfaction with transaction is contrary to the prediction from primitive emotional contagion theory.

In conclusion, both types of mood mechanisms insist EAD impacts service outcomes through changes in customer positive affect. Following affect-as-information model (Schwarz & Clore, 1988) and affect infusion theory (Forgas, 1995), customers consider their own affective states as evaluative information to form judgments about the service encounter. The main difference between these two mechanisms is which EAD facet contributes to the changes in customers’ affective responses—EAD positivity or EAD authenticity.

The cognitive mechanism refers to customers’ cognitive appraisal of EAD as part of the service. “Service with a smile” as a well-known organizational norm, is also a common expectation in customers’ mind. Barger and Grandy (2006) propose that smiling behavior at the service encounter indicate higher service quality via showing responsiveness and caring. This process is distinct from customers’ imitation of employee’s expression or mood. They found that service quality appraisal, rather than changes in customers’ affective states, fully mediate the relationship of EAD positivity and service encounter satisfaction.

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5 In their study, the smiling behavior were recoded and coded three times (i.e., at the beginning, in the middle and at the end of the service encounter). According the authors, they directly measured the smiling strength and indirectly measured the smiling frequency.
In summary, a careful examination of previous studies reveals some fundamental differences in the nature of which EAD facets have been empirically tested in them. Recognition of these methodological differences draws attention to an important theoretical issue that has never been addressed. On the one hand, EAD effects were tested at brief, transparent encounters with standardized script, such as bank transaction, supermarket check-out and fast food service. Empirical evidence from these encounters (Barger & Grandey, 2006; Pugh, 2001; Sutton & Rafaeli, 1988) provides support to the primitive emotional contagion mechanism. This first perspective indicates that service providers should display positive emotions to the larger extent and more frequently to facilitate the emotional contagion process. On the other hand, researchers investigate the EAD effects at the more extended, more complex and emotionally charged encounters, such as shore-stores, personal movie-rental consulting service. These researchers (Grandey et al., 2005; Hennig-Thurau et al., 2006; Tsai & Huang, 2002) emphasize the importance of EAD authenticity, and argue that EAD positivity is less influential, if not irrelevant. Therefore, different theoretical explanations of EAD effects lead to inconsistent implications for marketing practice.

THEORETICAL BACKGROUND AND HYPOTHESIS

Situational Factor: The Moderation Effect of Encounter Affective Content Level

The role of emotion differs at various service encounters. Price, Arnould and Tierney (1995) categorize the services based on their affective content level, which refers to the emotional arousal associated with the encounter. At low affective content encounters, customers are motivated by the functional benefits of the services. Emotional components are less important than other factors (i.e., competence and efficiency). At high affective content encounters, emotional content is nonetheless an important part of interaction and service satisfaction (e.g., gift selection, financial advising), or the consumer is motivated by the affective benefits offered by the service (e.g., health spas, martial arts training, and adventure recreations).

Based on this seminal work, we summarize the main characteristics of service encounters with low or high affective content level in Table 1.

<table>
<thead>
<tr>
<th>High Affective Content Encounter</th>
<th>Low Affective Content Encounter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: gift shopping, hair styling, home redecorating, plastic surgery, health spas, adventure recreations, full-service restaurant</td>
<td>Example: bank transaction, hotel check-in, supermarket check-out, dry-cleaning, photograph developing, fastfood purchase</td>
</tr>
<tr>
<td>The affective benefit is the primary</td>
<td>Customers’ primary motivation is the</td>
</tr>
</tbody>
</table>

Figure 3: Cognitive Mechanism: Appraisal of Service Quality
motivation of the service, or it is an important information source of service evaluation.

- There is a disparity between the emotional state of the customer and the service provider. A daily routine service delivery for the employee may be exceptional or extraordinary service consumption for the customers.
- Customers expect and demand to be treated as a unique person rather than in a standardized manner.
- “In delivering affective service content, service providers interpret and explain events to crystallize customer expectations and provide evidence that expectations are being met.”
- “Commercial intentions or “synthetic” emotions can be more offensive than none at all.” Customers expect spontaneous responses to specific service context and interpersonal interaction.

functional benefit offered by the service.

- As a routine consumption or service, there is no or little disparity between the emotional state of the customer and the service provider.
- Customers expect to be treated same as other customers.
- Customer expectations and evaluations are based on standardized script and social norm.
- Customers expect standardized and consistent emotional display. Commercialized smiles are understood.

Low Affective Content Encounter

At low affective content encounters (e.g., supermarket check-out, bank transaction), consumers are motivated by the functional benefits of the service. The familiarity, typicality and low complexity of the service encounters may make customers less attentive to emotional information. The display of positive emotions will be simply appraised as a fulfillment of the work role and a courtesy expression in the social context. Emotional components are less important than other factors (i.e., competence and efficiency). Customers pay less attention to employees’ emotional cues at low-affect encounters, thus the unconscious primitive emotional contagion is most likely to occur (Hatfield et al., 1992, 1994). The more frequently and strongly that the frontline employees smile, the more likely that customers catch the positive emotional cues, move to better mood states and have higher customer satisfaction.

High Affective Content Encounter

At service encounters with emotional benefits from the product or service consumption, such as gift shopping, theme parks, art lessons, multi-day white water river rafting, the emotional benefit is critical to the service delivery. Service providers’ display of positive emotions is considered as an important part of the service delivery. Customers will appraise their own feelings or affective state as information to make judgments about the service. Moreover, some services are complex and ambiguous due to the lack of standardized script or beyond the scope of routine service. For example, there are no standardized expectation and evaluation criteria for financial advising or plastic surgery; or for personal reasons, customers have no pre-defined expectation and consumption knowledge, so they rely on service providers for suggestions. Because of incomplete information and decision importance, customers are motivated to collect all kind of information to help them make purchase decisions and form judgments about the service effectiveness. Research on emotion communication shows that emotional message recipients may interpret and evaluate the emotional expressions besides affective
components. The receiver may make inferences about the emotion displayers’ current cognitive state, social attitude and so on (for a review, see Russell, Bachorowski, & Fernandez-Dols, 2003). Hence during the interpersonal interaction at high-affective service encounters, customers may perceive and interpret EAD as one kind of social information to judge the authenticity and trustworthiness of service providers’ suggestions or comments. For example, whether this “friendly” financial representative is genuinely concerned about my questions? Whether this hairstylist is interested in me as a unique customer? Therefore, both the customers’ affective state and the employees’ displayed emotions will be more deliberately processed in the high-affective encounters than in the low-affective encounters. Both EAD positivity and authenticity are important in the high affect-relevance encounters.

H1: There is a positive association between EAD positivity and customer satisfaction.

H2: EAD authenticity has a stronger positive relationship with customer satisfaction when the affective content of the service encounter is high compared to when it is low.

STUDY 1

Previous research focused on different EAD facets (i.e., positivity versus authenticity) leading to conflicting recommendations: “frequent smiling” vs. “authentic smiling”. To reconcile these conflicts, we attempt to demonstrate the differential effects of EAD positivity and authenticity on service outcomes at different types of service encounters. We expect that EAD positivity is positively related to customer satisfaction in all conditions, but EAD authenticity effect is moderated by the affective content level of the service encounter.

Method

Design.

The experiment has a $2 \times 2 \times 2$ (positivity: high vs. low) × (Authenticity: authentic vs. inauthentic) × (service encounter affective content: high vs. low) between-subject design with two control groups (no smile at low affective-content encounter and no smile at high affective-content encounter).

Stimuli Development.

Videotaped stimuli are preferred over other techniques (e.g., written vignettes, field observations) for the purpose of this research because (1) the psychological and behavioral effects induced by videotapes are similar to those observed in real service settings (Batson and Hui 1992); (2) videotapes could show employees’ affective display in a more realistic and dynamic manner (Levesque and McDougall 2000) (3) pre-recorded interactions between customers and employees allow researchers to manipulate conditions of interest and have better control of confounds (Grandey et al. 2005).

We recruited a filming crew for this project with one professional video producer, four actresses and one assistant. Actresses were selected from part-time employees at local stores. Because they are not professional actors, we first train these potential
candidates with pertinent materials (e.g., Hochschild 1983, Grandey 2003) and acting exercises for a total of 10 hours. These techniques are adopted from previous EAD studies (i.e., Hennig-Thurau et al. 2006; Grandey et al. 2005). After a series of auditions and rehearsals, two final actors were chosen to play the customer and service employee in the final video. At simulated service encounters, actresses were videotaped to represent four conditions: authentic/high-positive, authentic/low-positive, inauthentic/high-positive, and inauthentic/low-positive. In a preliminary manipulation check, the practice videos were subjected to coding by two coders to ensure that the videos could be categorized in the intended way. If there was disagreement or ambiguous answer, the actors continue their practice.

When the actors and the experimenter were all satisfied with the performance skill, the final versions of the videos were created in two real local stores. Based on a pretest result, we selected two everyday service scenarios relevant to the students and with different levels of affective content: purchasing a dictionary at a bookstore (low affective content service) and buying flowers at a gift shop (high affective content service). The actors portrayed two service encounters: during their regular business hours. Professional camera, lights and microphones were used to ensure the service provider’s face was in clear view and the conversation was clearly recorded with realistic noises. To minimize the influence of on-screen customer on audience perceptions, the customer could be seen only from the back. At each store, we performed multiple takes and shoot from different angles. Finally, the authors and video producer edited all the videotapes together to ensure all pieces are of similar length and comparable visual and audio qualities. The scripts and scenes were controlled to be identical for conditions at each store. The same actress acted as the employee at both scores and across all the conditions.

Manipulation of EAD Positivity

With only a few exceptions (e.g., bill collectors, funeral service employees), positive emotional displays are proper at most service encounters. The actress was asked to be customer-oriented and display positive emotions. A smile is defined as a noticeable upward twist of lips (Barger & Grandey, 2006; Hennig-Thurau et al., 2006). The actress was instructed to smile frequently with teeth exposed in the high positivity condition, and to minimize the frequency and strength the smiling behavior in the low positivity condition. In the control conditions, the actress had neutral emotional display.

Manipulation of EAD Authenticity

Authenticity manipulation was adopted from (Grandey et al., 2005; Hennig-Thurau et al., 2006). For the authentic EAD conditions, the actress was asked to think of the incoming customers as a chance to help someone and make them feel good. She was encouraged to create genuine positive inner feelings and displays (deep acting). For the inauthentic positive display conditions, the actress was instructed to adapt only his or her outward behavior to the customer’s needs but not his or her inner feelings. She was required to smile in this scene, and she followed the command by manipulating her face muscles without modifying her thoughts or feelings (surface acting). Moreover, before filming each scene, the other filming team members helped the actress to create the appropriate emotions within herself. For example, the team told jokes and discussed
fondest memories before filming the deep-acting, authentic condition, but had irritating arguments before shooting the surface-acting, inauthentic condition. Scenes were refilmed until both the actors and the researchers are satisfied with their skills to act out the specific roles required for the experimental conditions.

*Preliminary Manipulation Check*

Four coders, who were not aware of the research purpose, viewed the video in a randomized order and categorized the videos correctly. Moreover, the amount of smiles were counted (i.e., more than ten smiles in the frequent conditions and three to five smiles in the infrequent conditions, less than one smile at the control conditions). Coders were asked to ensure that other EAD components are consistent across conditions: greeting, thanking, eye contact and rhythmic vocal tone.

*Participants and Procedure*

A total of 370 undergraduate students (142 women and 228 men) from a large mid-western university participated in the main experiment for course credit. We randomly assigned each participant to one of ten conditions. Upon arrival in a computer lab, participants were seated in a way to minimize eye contact or interactions and informed that this study is about improving frontline employees’ service quality. The video stimuli were shown by Windows Media Player on each computer screen. The experimenter instructed the participants to observe the encounter from the perspective of the customer in the scene. The validity of this role-playing technique in a between-subject design is well-established (Bitner, 1990; Grandey, Glenda, Anna, Karen, & Lori, 2005). After watching the video, participants completed the survey items after which they were debriefed.

*Measures*

**Manipulation Checks**

Two scales were created to measure two key dimensions of service encounter affective content level. A three-item scale ($\alpha = .73$) was used to check the “emotionality” of the service consumption: “This service consumption is emotionally involving;” “The service consumption is a sentimental decision;” and “The service consumption is a rational decision (reverse coded)”. Participants were also asked the importance of EAD to them in different encounters. This “EAD relevance” scale ($\alpha = .82$) also has three times to reflect the degree to which the employees’ positive emotional display matters to the participants in different encounters. EAD authenticity was measured by the two-item scale developed by Grandey et al. (2005).

**Customer Satisfaction**

To measure customer satisfaction, we adapted four items from the work of Hennig-Thurau, Groth, Paul, & Gremler (2006). The items are “I was delighted by this service experience; This service experience was a great one; I was satisfied with this specific service experience; I really liked this service experience.” For all measures, Likert-type agreement scales were used where 1 indicates “strongly disagree” and 7 indicates “strongly agree.”
Results

We dropped data from 10 participants who were interrupted during the experiment or who did not follow the experimental procedure. 46 observations from the out-group members (i.e., individuals from other ethnicities) were not included because of our proposition about group membership effect on EAD perception. We used data from the remaining 314 participants in the subsequent analysis.

Manipulation Check

The selected service encounters (purchasing a dictionary at bookstore vs. buying flowers at gift shop) showed significant differences in their affective content level. The differences were reflected by their emotionality (\(M_{\text{low}}=2.00\), \(M_{\text{high}}=5.04\), \(t=47.89\), \(p<0.001\)) and EAD relevance (\(M_{\text{low}}=3.59\), \(M_{\text{high}}=4.87\), \(t=11.75\), \(p<0.001\)). Confirming the pretest results, participants reported higher perceived authenticity in the authentic conditions than inauthentic conditions (\(M_s=3.85\) and 2.08, respectively; \(t=9.63\), \(p<0.001\)).

Customer Satisfaction

The four items of customer satisfaction scale were highly correlated (\(\alpha=0.965\)), and we averaged them to from a customer satisfaction index. We submitted this index to a 2(place: high affective-content encounter, low affective-content encounter) × 2(Authenticity: authentic, inauthentic) × 2 (Frequency: frequent, infrequent) analysis of variance. The results from this analysis appear in Table 1.

The overall model was significant (\(F(7, 245)= 24.05\), \(p<.001\)). Consistent with H1, the results revealed a main effect of frequency (\(F(1, 245)= 5.78\), \(p=0.02\)). As we predicted, customer satisfaction was higher among participants in the frequent condition (\(M=4.64\)) than in the infrequent condition (\(M=4.25\)). Furthermore, consistent with H2, a two-way service context × authenticity \(F(1, 245) = 26.46, p<0.001\) emerged (shown in Figure 1). Follow-up analyses revealed the source of this interaction: The simple effect of authenticity was more pronounced among participants in the high affective content condition than among those in the low-affiliation condition (\(F(1, 121)=150.92\), \(F(1, 128)=14.68\), respectively, \(ps<0.001\)).
The independent samples T-test between control groups and inauthentic conditions reveal the difference in the ordering of customer satisfaction in different service context (i.e., inauthentic/frequent > inauthentic/infrequent > no smile at low-affective content encounter; no smile > inauthentic/frequent > inauthentic/infrequent at high-affective content encounter.) customer satisfaction is significantly lower in the no smile condition than inauthentic conditions at the low-affective content encounters ($M_{control}$=3.34, $M_{if}$=4.52, $M_{ii}$=4.14, $t=3.12$, $p<0.01$; $t=2.13$, $p<0.05$). However, at the high-affective content encounters, customer satisfaction was higher among participants in the control condition than in the inauthentic conditions ($M_{control}$=3.65, $M_{if}$=2.97, $M_{ii}$=2.58, $t=2.04$, $p<0.05$; $t=3.06$, $p<0.01$).
B: Mean Customer Satisfaction Across Service Context, EAD Authenticity, and EAD Frequency

<table>
<thead>
<tr>
<th>Low Affective Content Encounter (Bookstore)</th>
<th>High Affective Content Encounter (Flower Shop)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentication</td>
<td></td>
</tr>
<tr>
<td>Frequent</td>
<td>5.51</td>
</tr>
<tr>
<td>Infrequent</td>
<td>5.04</td>
</tr>
<tr>
<td>Control (No Smile)</td>
<td>3.34&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Notes: Different superscripts within the same service encounter imply significance at α<.05.

Discussion
We predicted that EAD positivity would be positively related to customer satisfaction in all conditions (H1), and EAD authenticity would have stronger impacts on customer satisfaction if the service encounter is high in affective content compared to service encounters with lower level of affective content (H2). Both hypotheses were supported. The study results provide further support to recent research emphasizing the importance (e.g., Hennig-Thurau et al. 2006, Grandey et al. 2005) of EAD authenticity. By including the control groups (neutral emotional expression), we showed that highly positive yet inauthentic smiles were much better than neutral emotional display at low-affective content encounters, whereas the reverse is true if at high-affective content encounters.

STUDY 2
In the first study, we demonstrated the differential effects of EAD facets (positivity vs. authenticity) on customer satisfaction as a function of service affective content level. Compared to EAD positivity, the judgment of EAD authenticity is a more involving process which requires more shared knowledge. Moreover, authenticity of individuals’ emotional expressions may be perceived or interpreted differently in various cultures and subcultures. In the second study, we attempt to understand how customers from different groups (i.e., ethnicities) perceive their in-group or out-group service provider’s affective display during the interpersonal communication, especially at those high-affective content encounters. Although we expect our study results to be generalizable to other inter-group communications as shown in psychology research (Elfenbein & Ambady, 2002a, 2002b), in this specific project, we focus on the interpersonal interactions between individuals from American and Chinese ethnicity groups.

In-group Advantage of Emotion Recognition
Previous research (Elfenbein & Ambady, 2002a, 2002b) has shown that individuals’ group membership may influence their motivation and ability of correctly interpreting others’ affective display. We understand emotions more accurately when they are expressed by members of our own cultural or subcultural group. This general tendency,
say “in-group advantage,” is because of the match between the cultural and social background of the expresser and perceiver. People from the same cultural background share similar learning and expressing style, emotional concepts or cognitive representations. Moreover, the ability of individuals from different cultural groups to understand one another’s emotions is not always symmetric; minority group members showed higher accuracy when judging majority groups than majority group members showed in return when judging minority group members. This effect could be so large that minority groups actually understood the majority’s emotional expression better than they understood their own.

Eastern and Western Cultural Difference in Decoding Rules

Display rules (how emotions should be displayed) and decoding rules (how emotions of others should be interpreted) are different in eastern and western context. For example, since display rules are more outward in American culture and more de-amplified in Asian culture, American emotional displays are generally with higher signal clarity (Lee, Chiu and Chan 2005). Moreover, Asian people are more likely to rely on eye muscles to interpret others’ emotions, whereas western people would focus more strongly on muscles around the mouth area (Yuki, Maddux and Masuda 2006). Since empirical findings (Ekman 1992, Ekman et al. 1988) suggest that eyes may provide more accurate cues than mouth for people to diagnose the authenticity of the emotional expression\(^6\), Asian people could have a better chance to correctly judge whether smiles indicate genuine or fake happiness.

Therefore, in the U.S., American customers (the majority group) are less likely to accurately interpret the authenticity of Chinese service providers’ emotional display. They are also less sensitive to how the minorities behave in the inter-group communications. Compared to the importance of genuineness of American employee, the difference between Chinese employees’ authentic and inauthentic affective display should be much smaller. However, for the Chinese customers (the minority group), they could correctly identify the authenticity of emotional expressions from both western and eastern cultures. They are sensitive to genuineness of service providers from both their own group and the majority group. On the basis of the preceding discussions, we predict the following:

H3a: When the service employee is American, the difference in EAD authenticity ratings should be equally large for American and Chinese customers.

H3a: When the service employee is Chinese, the difference in EAD authenticity ratings should be smaller for American customers than Chinese customers.

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\(^6\) Based on Ekman’s research on Duchenne smiles the key difference between a true smile and a fake smile is the movement of orbicularis oculi muscles around the eyes. Fake smiles involve the zygomatic major muscles only, but Duchenne smiles involve both the contraction of the orbicularis oculi muscles and zygomatic major muscles.
H4a: When customers are from majority group (American customers), EAD authenticity has a stronger positive relationship with satisfaction when the service provider is in-group member (American employee) than when (s)he is out-group member (Chinese employee).

H4b: For customers from minority group (Chinese), EAD authenticity of both Chinese and American service provider will have a similarly strong influence on customer satisfaction.

Method

Design.
The experiment has a 2 (Authenticity: authentic vs. inauthentic) × 2(Service provider: American vs. Chinese) × 2 (Customer: American vs. Chinese) between-subject design with two control groups (no smile at low affective-content encounter and no smile at high affective-content encounter).

Stimuli Development and Manipulation of Independent Variables
Similar to study 1, we hired a filming crew for this project with the same professional video producer, eight actresses and one assistant. Actresses were students who took part-time jobs as service employees at local stores. The training and practicing process was consistent as study 1. After a series auditions and rehearsals, four actresses (two American female, two Chinese female) were chosen to play the customers and service employees in the final video. At simulated service encounters, actresses were videotaped to represent two conditions: authentic EAD versus inauthentic EAD. The script and scenarios were identical to the flower shop condition in Study 1. Two noteworthy changes in this study are that (1) we controlled EAD frequency to be the same across the conditions (i.e., the employee always served with frequent smiles); (2) we created four versions of the video clips, so that Chinese customers could identify with the Chinese customer in the scene, and vis-à-vis for American customers.

Participants and Procedure
A total of 185 students (106 American and 79 Chinese) from a large mid-western university participated in this experiment for course credit or gift cards. The experiment was conducted in a computer lab following the same procedures as Study 1.

Results

Manipulation Check
EAD authenticity was measured by the same two-item scale as in experiment 1. Chinese customers gave significantly higher authenticity ratings of Chinese employee’s authentic emotional display than her inauthentic emotional display (M_authentic=4.45, M_inauthentic=2.05, t(37)=4.97, p<0.001). Similarly, there is a significant difference in American customers’ ratings between American authentic EAD and American inauthentic EAD M_authentic=4.71, M_inauthentic=1.44, t(50)=7.83, p<0.001). Thus the authenticity manipulation of both Chinese and American EADs was effective.
Dependent Variables
Perceived EAD Authenticity

Consistent with our hypotheses H3a and H3b, a three-way interaction emerged (F (1, 177) = 16.57, p<0.001), which can be seen in graphic form in Figure 2. Chinese customers gave significantly different authenticity ratings for authentic and inauthentic Chinese EAD as discussed above, whereas American customers cannot tell the genuineness of Chinese employee’s affective display (M authentic=3.53, M inauthentic=3.30, t(52)= .60, p-ns). However, for when the service provider is American, both Chinese and American customers perceive significant difference between the authentic and inauthentic EAD (Chinese customers: M authentic=4.08, M inauthentic=2.28, t(38)=3.64, p<0.001; American customers: M authentic=4.71, M inauthentic=1.44, t(50)=7.83, p<0.001).

Figure 2: Three-way interaction among customer/employee group memberships and EAD authenticity on perceived EAD authenticity
Customer Satisfaction

As we predicted in hypotheses 4a and 4b, the customer/employee group memberships and EAD authenticity interact to influence customer satisfaction. This significant three-way interaction (F(1,177)=7.93, p=0.005) is shown in Figure 3. When the service provider is from the minority, Chinese group, American customers cannot differentiate the authentic and inauthentic Chinese EAD. They are also less sensitive to minority’s behavior. Thus, American customers were equally satisfied with authentic and inauthentic Chinese EAD ($M_{authentic}=5.09$, $M_{inauthentic}=4.62$, $t(52)=1.23$, p-ns), whereas Chinese customers were satisfied only if the Chinese employee was genuine ($M_{authentic}=5.05$, $M_{inauthentic}=2.89$, $t(37)=6.59$, p<0.001). In the American employee condition, both American and Chinese customers have the motivation and ability to correctly interpret the genuineness of the service provider. Authentic American EAD led to much higher customer satisfaction than inauthentic American EAD (Chinese customers: $M_{authentic}=5.18$, $M_{inauthentic}=2.34$, $t(38)=9.45$, p<0.001; American customers: $M_{authentic}=5.40$, $M_{inauthentic}=2.26$, $t(50)=9.34$, p<0.001)

Figure 2: Three-way interaction among customer/employee group memberships and EAD authenticity on customer satisfaction

![Estimated Marginal Means of Customer Satisfaction](image1)

![Estimated Marginal Means of Customer Satisfaction](image2)
Discussion

In the second study, we found that the influence of EAD authenticity on customers’ perception and evaluation of the service experience was moderated by customer/employee group membership, supporting hypotheses H3ab and H4ab. We focused on the interpersonal interaction between customers and employees from either American-majority group or Chinese-minority group. Since Chinese customers have higher motivation and better emotional recognition knowledge about both Chinese and American employees’ affective display, they reported significantly different ratings of authentic and inauthentic EAD in both conditions. When the service provider is an ingroup member, American customers’ evaluations of service experience also differ significantly for authentic and inauthentic EADs. But when the service provider is an outgroup Chinese employee, American customer lack the motivation and cultural knowledge to interpret the service provider’s genuineness, reported similar ratings for both authentic and inauthentic conditions.

GENERAL DISCUSSION

It is commonplace for managers to require their employees providing service with a smile. Some of the previous research (Rafaeli and Sutton, 1987; Pugh 2001) also supports this view. In contrast, recent research (Grandey, Glenda, Anna, Karen, & Lori, 2005; Hennig-Thurau et al., 2006)on employees’ affective display suggests that simply smiling at your customers is not enough, if not detrimental. Researchers argue that the frequency and intensity of employees’ positive emotional display do not have significant impacts on customers’ perception and evaluation of their service experience. What really impacts customer satisfaction is the service providers’ genuineness. However, the authenticity requirement is not costless. It is much more difficult and expensive for managers to manage frontline employees’ authentic internal feelings and external expressions (Hennig-Thurau et al., 2006). Recognizing these two conflicting views of EAD effects, our research reconciled the previous findings by a careful examination of different foci in existent literature. We categorized EAD components into two dimensions: positivity (the frequency and strength of positive emotional display) and authenticity (the genuineness of the emotional display). The first research line generally tested EAD effects at service encounters with low level of emotional arousals (e.g., convenience store checkout), whereas the second research line mostly focused on encounters with high level of affective content (e.g., personal movie-rental consulting). In our first study, we examined differential effects of different EAD dimensions at different encounters with either high or low affective content. We showed the moderation effect of service encounter types, the positive relationship between EAD and customer satisfaction is stronger at high affective-content encounters than at low affective-content encounters. The high-positive EAD leads to better customer satisfaction than low-positive or neutral EAD at low affective content encounters. Unexpectedly, positive EAD, if fake, may lead to even lower customer satisfaction than neutral EAD. Our empirical results provide further evidence for the second research perspective which emphasizing the genuineness of the service provider. Our second study proposed an interpersonal factor that has never been tested in EAD literature—the customer/employee membership. We selected two ethnicity groups—American and Chinese for two reasons: (1)American customers are from the majority group in the US, whereas Chinese customers are from the fastest grouping
minority group in the US; (2) American and Chinese customers are two representative samples of western and eastern cultural populations. Psychology research (Elfenbein & Ambady, 2002a, 2002b) on intergroup emotional recognition suggest that people from the same ethnicity group shared common knowledge about displaying and decoding rules, thus are more likely to judge the emotional expression correctly. Asian people focus on eye muscles, which are better indicators of authenticity, than western people who focus on mouth muscles. Thus, we predicted both American and Chinese customers could identify the authentic and inauthentic emotional display from the American employees and respond accordingly. But only Chinese customers could tell the genuineness of Chinese service provider. Our study 2 proved our prediction and showed that American and Chinese customers are equally dissatisfied with American employees’ inauthentic emotional display, yet American customers perceived authentic and inauthentic Chinese EAD to be similar and equally satisfying.

In two studies, our research reconciled conflicts in previous studies by providing evidence of two moderation effects. As the first attempt in EAD research to test cultural variables, we examined the interpersonal interaction between people from different ethnicity groups. Our research provides more consistent theoretical guidance for marketers: service providers should serve their customers with genuine affective display. This is a must in high-affective content encounters. At low-affective content encounters, even a fake smile is better than a neutral face. When customers are employees are from different ethnicity groups, employees’ inauthentic positive affective display will not backfire if the employee is from the Asian minority group and the customers are American.
REFERENCES


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THE RELATIONSHIP BETWEEN NEW BRAND INFORMATION EXPOSURE AND FUTURE PURCHASE INTENTIONS: THE MODERATING ROLE OF BRAND IMPLICIT IMAGE

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A measure of individual differences in brand implicit image (BII), defined as the extent to which consumers believe that brand attributes are fixed (brand-entity theorists) versus changeable (brand-incremental theorists), was introduced and validated in chapter 1. In chapter 2, I found that the new (inconsistent) brand information (i.e., a price and quality change) influenced brand-incremental theorists to a larger extent than brand-entity theorists, which is indicated by the changes in their future purchase intentions. In chapter 3, I showed that the service recovery offered by a company influenced the future purchase intention of brand-incremental theorists more than that of brand-entity theorists.

The continuous change in consumer behavior alongside the volatility of business environment has led managers take on desperate measures to manage their brands. In some cases, brand managers find it essential to reposition their brands to maintain or enhance their market share. Yet, in other cases, managers try to overhaul their brand image in an attempt to reestablish the brand perceptions in their consumers’ minds.

When a company undergoes a change in its brand image, there is often a compelling business reason. However, how should managers ensure that consumers do not misjudge the new change as a negative sign as though something is wrong and start worrying if it means that the brand is not doing well? Or, how should managers appropriately communicate the change in a direction that is suitable for the target market? Besides, should a brand take on radical changes, in the first place, to rebuild its brand image in the minds of consumers? If so, what are the key issues that brand managers must have in mind so that their brand equity stays intact and the new image is reinforced?

In the business world, there are several examples that illustrate companies’ attempts to restore their brand image in consumers’ minds. Some of these companies have implemented the change to keep up with the inevitable needs of the market. However, a few other companies have taken on the change as a way to repair their brand image in consumers’ minds after devastating failures that caused the brand to be inferior.

Although many brands change overtime, the key to successfully implement the change is through evolution, not revolution. That is, changing the brand image in unexpected ways can cause consumers to be concerned about the changes in the brand values. Hence, companies should execute the change gradually in a direction that suites the target market.

Generally, a brand image is how consumers perceive the brand, or how they see it (Keller 1993). As a result, companies must work hard to make sure that what consumers see and think is identical to what the brand communicates to them. When there is a strong brand personality to which consumers are attracted, significant brand changes may
destroy those emotional attachments and as a result consumers will discontinue purchasing from the same brand. For instance, General Motors (GM) spent $4 billions as an attempt to completely reposition the Oldsmobile brand as a luxury brand, accompanied by logo changes and product variations to match European competitors. Hence, a new Aurora was introduced in 2001 to succeed the Eighty-Eight and the LSS. It was introduced to bring new life to Oldsmobile, but did not display the Oldsmobile name on the exterior. There was also a talk at the time that the name of the Oldsmobile would be changed to simply Aurora. However, customers could not accept the extreme transformation of the brand due to their associations with the old brand heritage. Consumers viewed Oldsmobile as if it no longer had the personality that they knew and consequently the company failed in its marketing revolution and was forced to end Aurora's production in 2003.

In addition to introducing new brands to supplant the flagship brand, companies sometimes encounter difficulties and resistance from consumers particularly when they use advertising campaigns to alter the negative brand images that consumers have in their minds. For example, in July 2005, complaint data obtained by Consumers Union, publisher of Consumer Reports showed that Cingular and AT&T had the worst combined complaint record for 2004. In an attempt to alter consumers’ initial beliefs about its poor service quality, Cingular started new advertising campaigns throughout the US market by adopting the prevalent slogan “Cingular, raising the bar”. However, the latest Consumer Reports cell-service ratings still ranked Cingular as one of the poorest performers in 2007.

Likewise, Wal-Mart recently launched a multimillion-dollar advertising campaign to silence its critics and hide the truth about the company. Many critics have accused Wal-Mart of paying its associates below the poverty line and forcing them to work off the clock. Also, Wal-Mart health care plan fails to cover over 775,000 employees. As a result, the focus of Wal-Mart advertising campaign has been to change people’s perceptions about Wal-Mart and introduce the company as a company that cares about its associates and their family members.

Evidently, the previous examples have one thing in common, which is to change consumers’ initial brand image using new brand information that is either created by the company or spread through consumers (e.g., WOM, Consumer Reports). However, one may wonder whether the new brand information (positive or negative) is successful in terms of influencing consumers’ brand perceptions and whether brand images, in general, are fixed or malleable in consumers’ minds.

In the marketing literature, researchers show that firms sometimes create negative initial impressions on potential customers and then face the problem of determining how to change these initial impressions through marketing campaigns (Muthukrishnan and Chattopadhyay 2007). These researchers claim that the marketing literature offers little guidance on how to do this, and the psychology literature suggests that negative initial impressions are much more resistant to change than positive initial impressions (Skowronski and Calston 1987). As a result, it is important for researchers to determine
the circumstances under which consumers are willing or reluctant to change the initial brand images that they have stored in their mind. This is important because it justifies companies’ future spending on marketing tools (e.g., advertising, change in price/quality, or service recovery) that are designed to alter consumers’ initial brand beliefs. More importantly, many companies have distinctive brand equity and try their best to keep its brand name unique and attractive. Therefore, it is also important for marketers of brands that have desirable images to know whether brand images are sustainable to maintain their brand equity.

In the current research, I draw on the implicit theory concept (IPT; Dweck 1986) to investigate whether consumers will be willing to alter or sustain their brand beliefs when exposed to new brand information that is specifically designed to change those initial beliefs. The implicit theory states that people differ in their implicit theories about the nature of human traits. Some people, known as entity theorists, think of human traits as immutable properties of individuals whereas other people, known as incremental theorists, think of human traits as changeable properties. Because brands can sometimes be perceived as possessing personality traits (Aaker, 1997), it seems likely that consumers will vary in the extent to which they view brands as malleable versus relatively fixed. These beliefs, in turn, should affect consumers’ willingness to encode new information into their overall perceptions of the brand. To test this idea, I develop a measure of individual differences in brand implicit image (BII) that distinguishes between brand-entity and brand-incremental theorists.

I mainly examine the effect of these two types of individuals on ones’ susceptibility to change an initial belief about a brand in variety of consumer settings. Specifically, I focus on studying the effect of newly presented brand information across these two types of individuals, and across a variety of marketing contexts ranging from product price/quality, service quality, and service recovery. Examining this phenomenon is important because marketers often seek to present their consumers with new messages that are designed to change their initial brand impressions (Muthukrishnan and Chattopadhyay 2007) in a beneficial direction. However, these actions are associated with a high level of failures, and this research identifies BII as a critical success factor.

I argue that brand-entity theorists are more likely to believe that prior beliefs about brands are accurate descriptions of brands in general compared with brand-incremental theorists. That is, when assessing new information about a brand that they have some initial beliefs, brand-entity theorists are more likely to characterize the brand based on these beliefs and pay less attention to new brand information. Whereas, brand-incremental theorists are more likely to exert some effort to analyze the new information and take it into account when making a purchasing decision. Therefore, in situations where there are competing points of view and new information, brand-entity theorists are less likely to incorporate the new brand information in their future purchasing decisions than brand-incremental theorists.

By implicating the BII concept, one can reasonably assume that those angry customers or critics of Cingular and Wal-Mart take on the entity theory approach for
evaluating the brands, which in turn makes them reluctant to accept the companies’ attempts to restore their brand images. However, the customers of Oldsmobile seem to take on the incremental theory approach for evaluating the brands since they were willing to encode the new brand information about the companies; although, the new brand image did not match with those customers’ needs.

Below, I built on the IPT literature to develop the BII concept and discuss the advantages that researchers would gain from using the BII scale as opposed to the IPT scale. I then described the development of the BII scale. After demonstrating the convergent and discriminant validity of the BII scale (chapter 1), I provided a set of studies using different consumer sittings to generalize the predictive validity of the BII construct. Specifically, in chapter 2, I evaluated whether the BII would moderate the relationship between exposure to new brand information (i.e., changes in price and changes in quality) and future purchase intentions. Furthermore, in chapter 3, I built on the findings of chapter 2 and examined whether the BII would predict the willingness of individuals to accept new information about a service recovery offered by a company after experiencing a service failure. More importantly, I looked at how this service recovery attempt might have impacted individuals’ future purchase intentions. In sum, these studies were aimed at exploring the degree to which beliefs about the brand malleability influence consumers’ future purchase intentions.

**Implicit Person Theories (IPT)**

Dweck (1986) defined implicit theories as lay beliefs about the malleability of personal attributes (e.g., ability and personality) that affect behavior. Dweck and her colleagues have found that individuals’ beliefs about the malleability of self-attributes predict judgments of the self (Hong, Chiu, and Dweck 1995; Robins and Pals 1996) and people differ in the implicit theories they hold about the nature of human traits (Chiu, Hong, and Dweck 1997; Dweck, Chiu, and Hong 1995; Dweck and Leggett 1988; Erdley and Dweck 1993; Levy, Plaks, and Dweck 1999). Some people (entity theorists) are more likely to think of traits as immutable properties possessed by individuals (Eberhardt, Dasgupta, and Banaszynski 2003). For example, entity theorists, who belief their intelligence to be a fixed entity, focus on judging their level of intelligence (i.e., they are pretty much concerned about whether they possess this fixed entity). These individuals also see academic failures as indications of their intellectual ability. On the other hand, incremental theorists, who belief their intelligence to be malleable, emphasize the developing as opposed to judging their ability, which means that they tend to focus on attributes that help them improve their performance rather than on self-judgment merely.

In addition, other researchers argue that this difference between entity and incremental theorists holds in the domain of social interaction as well (Erdley et al. 1997; Benenson and Dweck 1986; Chiu, Hong, and Dweck 1994; Goetz and Dweck 1980). That is, a belief in fixed self-attributes versus malleable self-attributes appears to be associated with a greater tendency to process information in terms of traits and trait evaluation (Chiu et al. 1997). Besides, Heslin, Latham, and Vandewalle (2005) expand the theoretical scope and empirical foundation of the IPT research by exploring whether the IPT affects managers’ recognition of improved employee behaviors. They noticed
that entity theorist managers’ judgments were anchored by their prior impressions; whereas incremental theorist managers’ judgments were not. Also, they found that the acknowledgment of improvement in employee performance was maintained over a 6-week period and was greater for incremental theorist managers than for entity theorist managers. Furthermore, these researchers investigated the effect of IPT on influencing entity theorist managers’ willingness to coach a poor performing employee, as well as the quantity and quality of their performance improvement suggestions (Heslin, VandeWalle, and Latham 2006). Particularly, they found that managers holding an entity theory that human attribute are unchangeable were declined to invest in helping others to develop and improve, relative to managers who held the incremental theory that personal attributes can be developed.

In general, it has been argued in the IPT literature that entity theorists view traits as having high predictive validity that can be used to draw future inferences about the underlying properties of people (Eberhardt et al. 2003). In contrast, incremental theorists are more likely to treat labels as tentative descriptions subject to revision. They are less likely to view traits with high predictive validity relative to entity theorists and to draw future inferences about people’s characteristics based on these traits. Thus, incremental theorists find trait labels and trait-relevant information less useful and are more likely to rely on new information compared with entity theorists (Eberhardt et al. 2003).

In a similar vein, Levy, Stroessner, and Dweck (1998) found that entity theorists considered stereotypes to be more predictive of future behavior than did incremental theorists. They claimed that compared with incremental theorists, entity theorists more quickly generated stereotypical traits to describe ethnic and occupational groups, and they showed greater confidence in the limited information they had available for doing so. Trait labels lead entity theorists to focus on trait-relevant and expectancy-consistent information (Erdley and Dweck 1993). As a result, entity theorists do not change their judgments about people and have greater tendency to make static judgments (i.e., personality or other trait judgments) of people, even on the basis of sparse information relative to incremental theorists (Chiu et al. 1997; Hong 1994; Hong et al. 1997). In addition, entity theorists are more likely to believe that trait-related behaviors are consistent over time, and that behavior observed in a particular situation is a good indication of personality traits compared with incremental theorists (Chiu et al. 1997; Hong et al. 1997).

**Brand Implicit Image (BII): From Theories of People to Theories of Brands**

Given some researchers’ view about the similarity between human and brand personalities (Aaker 1997; Fournier 1998), it is possible that, just as individuals differ in their implicit beliefs about the malleability of human personality, they could very well differ in their implicit beliefs regarding the malleability of brands. These beliefs, in turn, could have important implications for whether consumers would be willing or reluctant to adjust their perceptions of a brand after receiving new information. To capture these individual differences, I propose a new construct, which I refer to as brand implicit image (BII). The main reason for introducing the BII concept as opposed to using the IPT
concept in the current research is that, in the brand literature there are two views that counterargue one another in terms of consumers’ brand characterizations.

For one thing, a number of researchers have argued that brand personalities are similar to human personalities (Aaker 1997; Azoulay and Kapferer 2003; Fournier 1998; Plummer 1985) and people infer brand attributes very much the same way as human attributes. This brand-personality concept has in recent years gained more widespread legitimacy among academic researchers and practitioners alike. Moreover, a number of studies suggest that consumers’ relationships with brands carry some similarity to social relationships (e.g., Fournier 1998).

Unlike the previous researchers’ view about the brand-personality concept, other researchers argue that the comparison between humans and objects has been controversial (Aggarwal 2004; Azoulay and Kapferer 2003), which implies that brands and human characteristics are not similar. These researchers claim that individuals process brand and human information in a different way. In this sense, although Aggarwal (2004) believes that sometimes people’s relationships with brands do behave as if they share the same relationship, he makes a case that people and objects differ in many ways and different approaches may be needed to examine them separately. In addition, it is argued that judgments of social stimuli (e.g., people) depend on inferred information, while judgments of nonsocial stimuli (e.g., brands) depend on concrete attributes (Lingle, Altom, and Median 1984).

In line with this view, Yoon et al. (2006) have found using functional magnetic resonance imaging (FMRI) that individuals indeed process brand and human information in different brain regions, which provides further evidence that makes the brand-personality concept (Aaker 1997) questionable. Therefore, in the current research, I am going to adopt the latter argument that brands and humans have different characteristics that are processed differently in individuals’ mind. This reasoning led to the belief that the IPT does not fully characterize individuals in terms of their brand implicit theories as the BII does because these two types of implicit theories are processed in different brain regions. Furthermore, since the IPT and BII scales measure two distinct entities (i.e., humans and brands), it is reasonable to believe that the BII and IPT measures are distinct, but related constructs, which is an important distinction in the current research.

In the present research, I define the BII construct as the extent to which consumers believe that brand attributes are fixed (entity theorists) versus changeable (incremental theorists) and I argue that the BII provides a framework for judging a brand based on the acquisition of new information about the brand. In theory, brand-entity theorists should be reluctant to encode new brand information that does not match with their initial beliefs and hence should base their future purchase intention on their initial perceptions. By contrast, brand-incremental theorists should be more likely to integrate new brand information into their perceptions of a brand, even if the information does not match with their initial beliefs because they are more likely to take other explanations and information into account to justify brand’s prior actions (good/bad) than brand-entity theorists. This reasoning led to the prediction that, when presented with new brand
information, brand-incremental theorists will be more likely than brand-entity theorists to change their future purchase intention based on the newly introduced information. Thus, if consumers initially develop a set of positive (negative) impressions about a brand, but then receive later new information that is designed to change these impressions more negative (positive), brand-incremental theorists should be less (more) likely than brand-entity theorists to show a future willingness to purchase from the same brand again.

Furthermore, I theoretically argue in the present research that brand-entity theorists take on the entity theory approach because they are more likely to experience cognitive dissonance due to the new brand information than brand-incremental theorists. That is, brand-entity theorists relative to brand-incremental theorists are more selective to new brand information to ensure the least amount of generated dissonance in their minds. Therefore, in the next section, I introduce the dissonance theory to explain the process of the BII concept in individuals’ mind.

**Individuals’ Information Selection and Processing**

One of the original and most enduring predictions derived from cognitive dissonance theory (Festinger 1957) is that individuals are motivated to seek out information that is consistent with their attitudes and to avoid or ignore information that is attitudinally inconsistent (Brannon, Tagler, and Eagly 2007). These researchers have found that selective exposure is more pronounced for stronger attitudes than weaker attitudes. More importantly, Frey (1986) has detailed many of the conditions necessary for such effects. For example, as is typical in dissonance research, choice and commitment are important factors for the selective exposure. Specifically, Frey and Wicklund (1978) found stronger selective exposure when participants had freely chosen to engage in the task compared to a no-choice condition. In addition, Cotton and Hieser (1980) found a greater preference for consonant information and less desire for inconsistent information among high-choice participants compared to low-choice participants. With respect to commitment, Frey and Stahlberg (1986) reported that committed participants reported a preference for supporting articles over opposing articles; whereas control participants demonstrated no such preference.

In addition to choice and commitment, attitude strength is another factor that influences selective exposure to attitudinally consistent information. It seems likely that selective exposure effects would be more evident for more strongly held attitudes, given that strongly held attitudes generally have greater impact on information processing and behavior (e.g., Krosnick and Petty 1995; Brannon et al. 2007). In addition, recent research in consumer behavior indicates that consumers become attached to various brands and form “relationships” with them (e.g., Fournier 1998), which results in equity for the brand (e.g., Keller 1993). The attitudes that consumers have for such brands are expected to vary in strength. Stronger attitudes are known to exhibit greater resistance to information that attacks them (e.g., Petty and Krosnick 1995).

Within these three factors that influence selective exposure to information, in this research, I focus on attitude strength as one of the drivers that compel brand-entity theorists to resist new brand information. I argue that, because of their prior impressions
about brands, brand-entity theorists develop stronger attitudes that influence their later decisions and these attitudes will not change when they are exposed to new information relative to brand-incremental theorists. One of the reasons why brand-entity theorists develop stronger attitudes compared with brand-incremental theorists is that brand-entity theorists, in general, assume that initial impressions have high predictive validity that can be used to forecast future behaviors. However, brand-incremental theorists are open to other explanations and believe that initial impressions are possibly less accurate.

Unlike prior research findings, Frey (1986) argues that people may fail to avoid counterattitudinal information because it may be useful in certain situations. For example, Cannon (1964) found a preference for counterattitudinal information among participants expecting to have to defend their preferred solution to a business problem in a debate because performing well in a debate requires knowledge of opposing viewpoints. Furthermore, although many articles show the importance of dissonance theory (Festinger 1957) for understanding the selective exposure phenomenon, in his revised version of dissonance theory, Festinger (1964) argued that dissonant information is not always avoided and consonant information is not always preferred. In his essay, Festinger (1964) specified the conditions under which dissonant information is presumably desired. These conditions are: 1) when prior information is perceived as easily refutable, 2) when dissonant information is useful for future decisions, and 3) when revision of the decision is possible. Therefore, when presented with attitudinal-inconsistent information, brand-incremental theorists may incorporate the information possibly because of one of the previously mentioned conditions, while brand-entity theorists may try to avoid the attitudinal-inconsistent information to avoid cognitive dissonance.

Specifically, brand-entity theorists are more likely to develop stronger attitudes toward a brand based on their initial impressions and use these attitudes to evaluate newly presented brand information later on. However, brand-incremental theorists are less likely to develop attitudes toward a brand based on their initial impressions and more likely to incorporate the new brand information into their future brand evaluation. Therefore, in this research, I believe that the BII is expected to moderate the relationship between exposure to new information and future purchase intentions. That is, because of their stronger attitudes toward the brand, brand-entity theorists are not influenced by new brand information and are more likely to base their later decisions on prior beliefs. In contrast, because of their ability to change their initial beliefs about the brand, brand-incremental theorists do not rely on their prior experiences and attempt to re-evaluate the brand based on the newly presented information, even if the presented information does not match with their initial beliefs.

I report, in this research, three chapters evaluating the measurement properties and validity of the new BII measure. After demonstrating the convergent and discriminant validity of the BII scale in chapter 1, I report a series of three studies (chapter 2 and 3) assessing the predictive validity of the BII using different consumer settings in an effort to increase the generalizability of the BII construct.
Chapter 1: BII Scale Development and Validation

BII Scale Development

To develop a representative scale of the BII construct, I initially created a pool of 48 items (following Churchill’s 1979 scale development approach). Most of the items were written by modifying those from an IPT scale developed by Levy, Stroessner, and Dweck (1998). As an example, one IPT item reads: “People can do things differently, but the important parts of who they are can’t really be changed.” To fit the brand context, I changed the item to read: “Many things about a brand can change, but my basic beliefs about that brand will not change.” All items were rated on a seven-point scale, anchored with (1) Strongly Disagree and (7) Strongly Agree. After eliminating items on the basis of redundancy or poor face and content validity, I retained a set of 24 items.

The modified scale, which consisted of 24 items, was administered to a sample of 67 undergraduate students at a large northwestern university who earned course credit to assess its item-total correlations. I retained the 12 items for the scale that possessed the highest item-total correlations within the data of the undergraduate sample. These items formed the full BII Scale (appendix A). The set of selected items was then submitted to independent samples of 438 and 407 undergraduate students from the same subject pool in two separate semesters in order to assess the characteristics of the BII (following the approach used by Cialdini, Trost, Newsom (1995) for assessing the characteristics of a scale).

The Characteristics of the Full BII Scale

The data patterns of the two independent samples were highly similar. The first sample of 438 resulted in a mean = 3.65, median = 3.67, mode = 3.08, SD = .91, skew = .01, kurtosis = -.16, and Cronbach’s α = .88, while the second sample of 407 resulted in a mean = 3.65, median = 3.67, mode = 4, SD = 1, skew = -.01, kurtosis = -.11, and Cronbach’s α = .88. Overall, the full BII scale has excellent distribution properties and stable reliability. That is, the mean, median, skew, kurtosis, and Cronbach’s α are almost identical for the two independent samples.

In addition, I combined the previous samples (N = 438 and N = 407) to form a large data set (N = 845) to assess the unidimensionality of the full BII scale. A CFA using EQS shows that all the one-factor model’s fits are reasonably acceptable (CFI = 0.92; SRMR = .05; RMSEA = .07).

Furthermore, another independent sample of 200 undergraduate students completed the full BII scale at two points in time (separated by four weeks) to evaluate the temporal stability of the scale (i.e., test-retest reliability), which is reasonably high (r = .65, p < .001).

A Brief Form of the BII Scale

For practical reasons, I sought to develop a brief form of the BII scale that would correlate highly with the full scale but would consist of fewer items. The full BII scale was administered to an independent sample of 416 undergraduate students. I run an EFA using this independent sample and selected the brief BII scale (i.e., six-item BII scale;
appendix A), which consisted of items that had the highest loadings (i.e., loadings > .6 and cross-loadings < .3), following Nunnally (1994). The brief BII scale has Cronbach’s \( \alpha = .81 \) and its correlation with the full BII scale is \( r = .91 \), which suggests that the brief scale items are representative of the full scale items.

In addition, a CFA using EQS was performed using the same large data set \( (N = 845) \) as in the earlier CFA of the full BII scale to confirm the unidimensionality of the brief BII scale. The CFA output shows that all the one-factor model’s fits are acceptable \( (CFI = 0.97; \ SRMR = .03; \ RMSEA = .08) \).

Furthermore, to test the stability of the brief BII scale, I used the same data points \( (N = 200) \) that was used in the earlier test-retest evaluation of the full BII scale. The result indicates that the brief BII scale is also stable over time \( (r = .62, p < .001) \).

**Convergent Validity**

Support for the convergent validity of the brief BII scale was shown using two methods. For one thing, I provided evidence that the BII is related to, but differentiated from, such constructs as the IPT (Levy, Stroessner, and Dweck 1998) and preference for consistency (PFC; Cialdini et al. 1995) by assessing the correlations between these constructs. In addition, I provided evidence that each BII indicator’s estimated loading (\( \lambda \)) on its underlying construct factor is significant and the average variance extracted of the BII construct approaches .5.

With regard to the first method, I theoretically predicted that the BII would positively correlate with the IPT because these two constructs compose of items that were designed to measure implicit theories, but the correlation should be weak since they are measuring the implicit theories of two different domains (human and brand traits). In addition, I predicted that the BII would positively correlate with the PFC because these two constructs measure an individual’s desire to be consistent within one’s responses. Again, this correlation should be weak because besides measuring consistency the BII measures an individual’s willingness to acquire new brand information.

In terms of empirical evidence, I asked 407 undergraduate students to complete the brief BII, IPT, PFC, and BL measures and then I submitted the data to a correlation analysis. The results of the correlation analysis confirm that scores on the BII has a significant positive relationship with scores on the IPT \( (r = .25, p < .001) \) and PFC \( (r = .18, p < .01; \) table 1). In addition to the correlation analysis, I ran a CFA using EQS to determine the coefficients of the BII indicators on their underlining construct factor. The CFA output indicates that all BII indicators’ loadings are greater than .5 (table 2) and the average variances extracted for the BII construct is .45 (table 1), which is approaching .5. Therefore, the correlation and CFA results provide adequate evidence that the brief BII scale has convergent validity.
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BII: brand implicit image; IPT: implicit person theory; PFC: preference for consistency; BL: brand loyalty
Diagonals are the square root of the average variance extracted (AVE); N = 407
**. Correlation is significant at the .01 level (2-tailed)
*. Correlation is significant at the .05 level (2-tailed)

<table>
<thead>
<tr>
<th>Item (BII) (α = .83; AVE = .45, N = 407)</th>
<th>Loading ( )(\hat{\lambda}) (N = 407)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In my opinion, a brand's image is something that doesn't change very much.</td>
<td>.61</td>
</tr>
<tr>
<td>I typically don't change my perceptions about a brand if I have formed an earlier impression of that brand.</td>
<td>.71</td>
</tr>
<tr>
<td>Many things about a brand can change, but my basic beliefs about that brand will not change.</td>
<td>.75</td>
</tr>
<tr>
<td>In my opinion, the attributes of a brand are concrete and do not normally change.</td>
<td>.80</td>
</tr>
<tr>
<td>In my opinion, a brand's image is something basic that can't be changed over time.</td>
<td>.55</td>
</tr>
<tr>
<td>A brand's core identity will always remain unchanged.</td>
<td>.54</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implicit Person Theory (IPT) (α = .82, AVE = .60, N = 407)</th>
<th>Loading ( )(\hat{\lambda})</th>
</tr>
</thead>
<tbody>
<tr>
<td>The kind of person someone is, is something basic about them, and it can’t be changed very much.</td>
<td>.67</td>
</tr>
<tr>
<td>People can do things differently, but the important parts of who they are can’t really be changed.</td>
<td>.85</td>
</tr>
<tr>
<td>Everyone is a certain kind of person, and there is not much that they can do to really change that.</td>
<td>.80</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preference For Consistency (PFC) (α = .87; AVE = .39)</th>
<th>Loading ( )(\hat{\lambda})</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is important to me that those who know me can predict what I will do.</td>
<td>.62</td>
</tr>
<tr>
<td>I want to be described by others as a stable, predictable person.</td>
<td>.75</td>
</tr>
<tr>
<td>The appearance of consistency is an important part of the image I present to the world.</td>
<td>.78</td>
</tr>
<tr>
<td>An important requirement for any friend of mine is personal consistency.</td>
<td>.70</td>
</tr>
<tr>
<td>I typically prefer to do things the same way.</td>
<td>.68</td>
</tr>
<tr>
<td>I want my friends to be predictable.</td>
<td>.64</td>
</tr>
<tr>
<td>It is important to me that others view me as a stable person.</td>
<td>.58</td>
</tr>
<tr>
<td>I make an effort to appear consistent to others.</td>
<td>.36</td>
</tr>
<tr>
<td>It doesn't bother me much if my actions are inconsistent.</td>
<td>.37</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Brand Loyalty (BL) (α = .71; AVE = .45)</th>
<th>Loading ( )(\hat{\lambda})</th>
</tr>
</thead>
<tbody>
<tr>
<td>I consider myself to be loyal to one brand soft drink.</td>
<td>.61</td>
</tr>
</tbody>
</table>
If my preferred brand or type of soft drink were not available at the store, it would make little difference to me if I had to choose another brand. \[.66\]

When another brand is on sale, I generally purchase it rather than my usual brand. \[.74\]

**Discriminant Validity**

Discriminant validity was shown by providing support that the BII construct is different from the IPT, PFC, and brand loyalty (BL; Beatty and Kahle 1988) constructs. Theoretically, I considered the BII construct to be different from the BL construct for two reasons. First, it has been determined that the main focuses of the BL measure are planned commitment (Bloemer and Kasper 1995; Chaudhuri and Holbrook 2001), repurchase intention and word-of-mouth (Narayandas 1996), or share of wallet and percentage of brand purchases in a product category (Baldinger et al. 2002), which are conceptually different from the BII construct. Second, the BL construct does not capture the willingness of individuals to account for new brand information or the malleability of brand attributes in individuals’ mind.

In addition, I argued that the BII construct would be different from the IPT construct because the IPT measures implicit theories about human attributes, which are found to be different from brand attributes (Yoon et al. 2006). Therefore, the IPT construct captures individual characteristics that are associated with human traits, while the BII construct captures individual characteristics that are associated with brand traits.

Lastly, I made a case that the BII construct would be different from the PFC construct because the PFC does not capture individual’s willingness or reluctance to acquire and incorporate new brand information into their future purchasing decisions. Moreover, the BII measures individual’s desire to change their beliefs about brand traits, which is not measured in the PFC. Therefore, based on these conceptual reasons, I believe that the BL, IPT, and PFC construct are theoretically different from the BII construct.

In addition to the theoretical argument, I provided empirical evidence for discriminant validity using two methods. For one thing, consistent with the rigorous test suggested by Fornell and Larcker (1981), the discriminant validity of the construct could be assessed by comparing the square root of the average variance extracted of each construct with its correlations with the other constructs (i.e., IPT, PFC, and BL). The square root of the average variance extracted could be interpreted as the correlation that a given latent construct had with its items (Hulland 1999), and it indicates that the latent constructs is more highly correlated with its items than the other latent constructs. Furthermore, I ran two CFA’s to compare a one-factor (constraint) model with a four-factor (unconstraint) model of the BII, IPT, PFC, and BL. A substantial drop in the chi-square value of the four-factor model indicates that the BII construct is distinct from the other three constructs.

As illustrated in table 1, using the sample of 407 undergraduate students, the square root of average variance extracted for BII is substantially greater than any other
correlations. Also, it was found that most of the four factor model’s fits are acceptable ($CFI = 0.91; SRMR = .05; RMSEA = .06$). Most importantly, the fits of the four-factor model are significantly better than the fits of the one-factor model ($CFI = 0.47; SRMR = .15; RMSEA = .14; p < .001$). Therefore, the square root of the average variance extracted and the CFA results confirm that the BII, IPT, PFC, and BL scales assess four unrelated and distinct constructs.

**Discussion**

The results from this chapter confirm the reliability, and validate the convergent and discriminant validity of the BII scale. The data support the conceptualization of the BII scale as a second construct that measures implicit theories that individuals hold for brands rather than people by showing that the BII scale is related to, but distinct from the IPT scale. In addition, the results support the conceptualization of the BII construct as empirically discriminable from such constructs as the PFC and BL constructs. These findings indicate that the BII scale measures a construct, which is beyond the IPT, PFC, and BL constructs. Therefore, it is reasonable to use the BII construct instead of these constructs to measure consumers’ brand image malleability and willingness to accept new brand information. The next two chapters were carried out to enhance the generalizability and predictive validity of the BII construct by implicating the moderating effect of the BII on the relationship between new brand information exposure and future purchase intention using different consumer settings.

**Chapter 2: Consumers’ Willingness to Encode New Brand Information**

Whether a brand is perceived as possessing fixed or malleable traits has important implications for a brand’s positioning and whether a brand can successfully extend into a new price or quality category. In the literature, consumer reactions to brand extensions have been shown to depend on the perceived fit of its membership in the new extension (Park, Milberg, and Lawson 1991). The success of a brand extension, therefore, depends on the consistency of the extension with existing brand beliefs (Loken and John 1993).

This reasoning brought about the following question. Would it be reasonable for Wal-Mart to open a luxury store with expensive products to target high-end consumers given that Wal-Mart is known for its everyday low price image and provides inexpensive products for average income consumers? More importantly, would this action by Wal-Mart influence all consumers in the same way?

In the subsequent studies, I shed some lights on these questions by showing how scores on the BII would moderate the impact of new brand information on future purchase intentions. In study 1, I examined individuals’ reactions to a change in the product price/quality level (i.e., low/high price). In study 2, I investigated individuals’ reactions to a change in the service quality level (i.e., poor/good service quality).

Throughout these studies, I expected that brand-incremental theorists would more likely than brand-entity theorists to encode the new brand information (i.e., a change in the product price/quality level or service quality level) after developing initial beliefs.
about the brand. In turn, this would be reflected in brand-incremental theorists’ higher willingness to change their future purchase intention relative to brand-entity theorists.

**Study 1: Using BII to Predict Reactions to Changes in a Product Price**

In study 1, I designed an experiment to predict the willingness of individuals to repurchase from the same company after being told that the company was introducing a new product that did not match with their overall price/quality image. In general, I predicted that brand-incremental theorists would more likely be influenced by the new price/quality information than brand-entity theorists. For example, when brand-incremental theorists perceive a company as having products with low (high) price and quality image and then are told that the company is introducing new products with prices that are above (below) their initial price and quality image, these brand-incremental theorists will be more (less) likely compared with brand-entity theorists to repurchase from the same company again.

**Method**

**Participants**

Participants were 148 undergraduate students from a large northwestern university who earned partial course credit in an introductory marketing course. Two weeks before the experimental sessions, participants responded to the IPT and the brief BII scales. As before, all items were rated on a seven-point scale, anchored with (1) Strongly Disagree and (7) Strongly Agree. To score participants’ responses to the brief BII and IPT scales, the scale items were averaged to form the BII ($\alpha = .88$) and IPT ($\alpha = .76$) indices, with higher scores on both scales indicating a stronger entity theory and lower scores indicating a stronger incremental theory. Following standard practice in the IPT literature (e.g., Dweck, Chiu, and Hong 1995, Levy et al. 1998), scores on the BII and IPT were subjected to median-splits in order to divide participants into groups of entity and incremental theorists, respectively.

**Price/Quality Pretests**

Before conducting the main experiment, 40 photos of various existing pens were carefully selected based on their price and quality levels. Out of these pens, 20 pens were of high price (e.g., price > $100) and quality levels and the rest were of low price (e.g., price < $1) and quality levels. An independent sample of 132 undergraduate students rated the perceived price and quality of the 40 pens by responding to the following statements: “This is a high quality pen”, and “This is an expensive pen”. Both items were rated on a nine-point scale, anchored with (1) Strongly Disagree and (9) Strongly Agree. Based on the students’ ratings of the price and quality, I selected six of the highest rated pens, six of the moderately rate pens, and six of the lowest rated pens and asked another sample of 40 undergraduate students to provide the highest, average, and lowest prices for each one of these pens to be used in the main experiment stimuli. Based on their average prices, I selected six pens that the students reported as having the highest average price ($M = $23) and six pens that the students reported as having the lowest average price ($M = $.80) for use in the primary study (appendix B).
Brand Name Pretest

For the purpose of this study, I preselected seven potential names from which I would select one brand name to be used as the main experiment stimulus (e.g., Dotum, Kaiti, Biondi, Mistral, Corsiva, Felix, and Neuropol). These names were selected based on the belief that different font styles would come across as credible, believable names for pens. Then, a pretest for these names was administered to the same 132 undergraduate students used in the previous pretest, but both pretests were separated by other unrelated tasks. For this pretest, the participants were asked to respond to the following statements: “In your opinion, to what extent do you perceive <brand name> as an expensive brand name?” and “In your opinion, to what extent do you perceive <brand name> as a high quality brand name?” Both items were rated on a nine-point scale, anchored with (1) Inexpensive and (9) Expensive and (1) Low quality and (9) High quality. The results indicate that the name Biondi scored in the middle of a nine-point scale on both price ($M_{Expense} = 4.9$) and quality ($M_{Quality} = 5.2$).

Main Study

In the main study, 148 undergraduate students received initial information about a company that manufactures and sells an array of pens. Participants were randomly assigned to one of two price/quality order conditions. In the low price-high price condition, the participants were told that Biondi was known for its affordable pens and were given on a single computer screen the photos of the six affordable pens with their prices and descriptions. The screen was shown for a period of 90 seconds. Then, participants responded to the following perceived quality (manipulation check) measures: “All things considered, I would say the Biondi pens have …” anchored with (1) Poor Overall Quality and (9) Excellent Overall Quality (Richardson, Dick, and Jain 1994) and “Overall, the Biondi pens are …” anchored with (1) Poor and (9) Excellent (Sprott and Shimp 2004). The two items were highly correlated and were thus combined into an overall perceived quality index ($\alpha = .92$).

After the manipulation check, participants in the low price-high price condition were told that Biondi wanted to expand its market share by serving a new type of customer who is looking for jewelry-quality, luxury pens and the managers wanted the participant’s help in evaluating the company’s brand image, assuming that he/she was a customer of the Biondi brand and sometimes buy its affordable pens. As before, participants saw on a single computer screen photos of the six expensive pens with their prices and descriptions. The screen was shown for 90 seconds. After being exposed to the expensive pens, participants were asked about their future purchase intention: “The likelihood that I would continue to purchase one of the expensive Biondi pens is”, anchored with (1) Very Low and (9) Very High. After the future purchase intention item, participants rated the quality of the expensive pens using the same two-item quality index described earlier ($\alpha = .91$).

Participants in the high price-low price condition were first told that Biondi was known for its expensive pens and were given on a single computer screen photos of the six expensive pens with their prices and descriptions. After viewing the pens for 90 seconds, participants rated the pens on the same two-item quality index described earlier (}
Next, participants were told that Biondi wanted to expand its market share by serving a new type of customer who is looking for affordable pens and the managers wanted the participant’s help in evaluating the company’s brand image, assuming that he/she is a customer of the Biondi brand and sometimes buy its expensive pens. Participants were given on a single computer screen the photos of the six affordable pens with their prices and descriptions. After being exposed to the affordable pens for 90 seconds, participants completed the future purchase intention measure described earlier for the affordable Biondi pens, and then rated the quality of the affordable pens using the same two-item quality index described earlier ($\alpha = .92$).

**Results**

**Manipulation Check**

Supporting the quality manipulation, after the first exposure to the pens, a between-subject t-test shows that participants rated Biondi to have a higher perceived quality in the high price–low price condition ($M = 7.10$) compared with the low price–high price condition ($M = 5.81$, $df = 146$, $p < .01$). In addition, after the second exposure to the pens, participants rated Biondi to have a lower perceived quality in the high price–low price condition ($M = 6.18$) compared with the low price–high price condition ($M = 6.64$, $df = 146$, $p < .06$). Furthermore, a within-subject t-test shows that, in the high price–low price condition, participants rated Biondi to have a higher perceived quality after the exposure to the expensive pens ($M = 10.7$) compared with after the exposure to the affordable pens ($M = 18.6$, $df = 68$, $p < .01$). However, in the low price–high price condition, participants rated Biondi to have a lower perceived quality after the exposure to the affordable pens ($M = 81.5$, $df = 78$, $p < .01$).

**Moderation Analysis**

The primary hypothesis was that the BII would moderate the effect of new information exposure on participants’ future purchase intentions. In line with this hypothesis, a 2 (high price–low price versus low price–high price condition) x 2 (BII: brand-entity versus brand-incremental theorists) between-subject ANOVA on the future purchase intention item reveals a moderately significant two-way interaction between the BII and the conditions, $F (1, 144) = 3.70$, $p < .06$. To further understand the interaction effect, I compared the means of brand-incremental and brand-entity theorists within a given price/quality condition because the primary goal was to test whether brand-incremental theorists compared with brand-entity theorists differ in their purchasing intentions after being introduced to the new information. Therefore, throughout this research, I reported the difference between brand-incremental and brand-entity theorists within each condition only.

As illustrated in figure 1, in the low price–high price condition, brand-incremental theorists had higher purchase intentions compared with brand-entity theorists, $M_{\text{Entity}} = 4.74$, $M_{\text{Incremental}} = 6.27$, $F (1, 77) = 6.78$, $p < .01$. By contrary, in the high price–low price condition, the difference between brand-incremental and brand-entity theorists is non-significant, $M_{\text{Entity}} = 4.55$, $M_{\text{Incremental}} = 4.45$, $F (1, 67) = .02$, $p = .87$. 170
Additional analyses, in this study, reveal that the more general IPT scale did not moderate the impact of new information exposure on future purchase intention as the BII scale did. For one thing, a 2 (high price–low price versus low price–high price condition) x 2 (IPT: entity versus incremental theorists) between-subject ANOVA on the future purchase intention item reveal a non-significant two-way interaction between the IPT and the conditions, $F(1, 144) = .68, p = .41$. Furthermore, when I included IPT as a covariate in the moderation analysis of BII and conditions, I found that the results did not change, supporting the validity of the BII in the present context.

**Figure 1**

![Bar chart showing future purchase intention after newly introduced information condition](image)

**STUDY 1: USING BII TO PREDICT REACTIONS TO CHANGES IN THE PRODUCT PRICE**

<table>
<thead>
<tr>
<th>Initial/New Price Information Condition</th>
<th>Future Purchase Intention after the newly introduced information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Price-High Price</td>
<td>Entity: 4.74, Incremental: 6.27</td>
</tr>
<tr>
<td>High Price-Low Price</td>
<td>Entity: 4.61, Incremental: 4.52</td>
</tr>
</tbody>
</table>

**Discussion**

The primary goal of study 1 was to evaluate whether individual differences in BII would influence how people responded to changes in the product price/quality level that did not match with their initial impressions. As hypothesized, compared with brand-entity theorists, brand-incremental theorists were more affected by the new price/quality information. However, I found that this effect existed only in the low price–high price condition. Based on the results, consumers may believe that expensive brands relative to affordable brands have the ability to go downward or upward in the product lines and produce different products for different consumers. However, this is not true for affordable brands. Individuals believe that affordable brands relative to expensive brands do not have the ability to go upward and produce expensive, luxury products because of the complexity that goes into manufacturing luxury products. Because of this reasoning, I argue that the difference between the brand-entity and brand-incremental theorists was
non-significant in the high price–low price condition, while the difference was significant in the low price–high price condition.

Besides a product price change, companies may improve their brand image by trying to enhance the perceived quality of their service, with the hope that this change will increase consumers’ future purchases. Therefore, it is also important for marketers to know whether providing new information about the quality of their service will actually be encoded and change consumers’ purchase intention about the brand. Hence, in the next study, I extended the findings of study 1 and tested whether the BII would moderate the effect of new brand information on individuals’ future purchase intentions using a service quality context.

**Study 2: Using BII to Predict Reactions to Changes in a Service Quality**

In study 2, I predicted the willingness of individuals to learn new quality information of a service provided by an Internet service provider after encountering a poor Internet service. Like study 1, I argued that brand-incremental theorists would be more likely to be influenced by the new information than brand-entity theorists. For example, when brand-incremental theorists experience a bad (good) service quality and then receive new quality information, their future purchase intentions will more likely be affected by the new quality information compared with brand-entity theorists.

**Method**

**Participants**

Participants were 196 undergraduate students from a large northwestern university who earned partial course credit in an introductory marketing course. Two weeks before the experimental sessions, participants responded to the brief BII and IPT scales. The BII ($\alpha = .80$) and IPT ($\alpha = .84$) indices were used in order to divide participants into groups of entity and incremental theorists, respectively.

**Main Study**

Approximately two weeks after completing the brief BII and IPT scales, participants read a hypothetical scenario in order to determine how they would respond to a change in a service quality provided by an Internet service provider (appendix C). Specifically, participants were asked to imagine that they had initially had a positive or negative experience with the company, and then they received additional information about the quality level of the service provided (from positive to negative or negative to positive, depending on the condition). After reading the initial scenario, the perceived quality measures were given to determine the extent to which participants thought that the initial experience with the internet service provider was negative/positive, unpleasant/pleasant, and bad/good using a nine-point scale. The three ratings were subsequently averaged into an overall evaluation index ($\alpha = .99$). After the second scenario (in which the customer received new quality information of the service), participants were given the same perceived quality measures that were given after the first scenario ($\alpha = .96$). Finally, participants indicated the extent to which they would consider purchasing a service plan from the same company again (i.e., future purchase intentions) on a nine-point scale, anchored with (1) Very Unlikely and (9) Very Likely, (1) Very Implausible and (9) Very Likely.
Plausible, and (1) Very Improbable and (9) Very Probable; $\alpha = .98$. These items were averaged to form the purchase intention index.

**Results**

**Manipulation Check**

Supporting the service quality manipulation, after the first scenario, a between-subject t-test shows that participants rated their experience to be more positive in the positive-negative condition ($M = 8.69$) than in the negative-positive condition ($M = 1.80$, $df = 194$, $p < .01$). In addition, after the exposure to the second scenario, participants rated their experience to be less positive in the positive-negative condition ($M = 2.51$) than in the negative-positive condition ($M = 6.39$, $df = 194$, $p < .01$). In addition, a within-subject t-test shows that, in the positive-negative condition, participants rated their experience to be more positive after the exposure to the positive scenario ($M = 8.69$) than after the exposure to the negative scenario ($M = 2.51$, $df = 98$, $p < .01$). However, in the negative-positive condition, participants rated their experience to be less positive after the exposure to the negative scenario ($M = 1.80$) than after the exposure to the positive scenario ($M = 6.39$, $df = 96$, $p < .01$).

**Moderation Analysis**

The primary hypothesis was that the BII would moderate the effect of new information exposure on participants’ future purchase intentions. In line with this hypothesis, a 2 (positive-negative versus negative-positive condition) x 2 (BII: brand-entity versus brand-incremental theorists) between-subject ANOVA on the future purchase intention index reveals a significant two-way interaction between the BII and the conditions, $F (1, 187) = 24.67$, $p < .001$. As can be seen in figure 2, in the positive-negative condition, brand-entity theorists had marginally higher purchase intention compared with brand-incremental theorists, $M_{\text{Entity}} = 5.09$, $M_{\text{Incremental}} = 4.37$, $F (1, 97) = 3.14$, $p = .08$. In contrast, in the negative-positive condition, brand-entity theorists had significantly lower purchase intentions compared with brand-incremental theorists, $M_{\text{Entity}} = 4.59$, $M_{\text{Incremental}} = 5.72$, $F (1, 95) = 8.55$, $p < .05$. These findings indicate that brand-incremental theorists compared with brand-entity theorists were influenced by the new quality information at a larger extent, which is reflected in their future purchase intentions.

Furthermore, additional analyses reveal that the more general IPT scale did not moderate the impact of new information exposure on future purchase intentions as the BII scale did. For one thing, a 2 x 2 between-subject ANOVA on the future purchase intention item reveals a non-significant two-way interaction between the IPT and the conditions, $F (1, 192) = .28$, $p = .60$. In addition, when I included the IPT as a covariate in the interaction analysis of BII and conditions, I found that the results did not change, which confirms the validity of the BII in the present context.
Discussion

In study 2, I evaluated whether individual differences in the BII would influence how people responded to new information about a change in the service quality level. As hypothesized, brand-incremental theorists compared with brand-entity theorists were more likely influenced by the newly presented information, which is indicated in their higher desire to re-purchase from the same company again. However, this effect was more pronounced within the negative-positive condition compared with the positive-negative condition. One possible explanation for this difference across the conditions is that entity theorists are more resistant to change when they develop negative initial impressions than when they develop positive initial impressions because of their stronger negative attitudes, while incremental theorists are willing to change even if they develop negative initial impressions. As a result, the difference between the brand-incremental and brand-entity theorists was more pronounced since brand-entity theorists had stronger negative attitudes in the negative-positive condition than in the positive-negative condition.

So far, I have shown that brand-incremental theorists compared with brand-entity theorists are more influenced by the new brand information whether the information is about a price or quality. While the findings of these two contexts have useful practical implications, there is also another important context that provides useful insights for managers. This context is a service failure and service recovery. Therefore, in chapter 3, I examined whether the BII would moderate the willing of consumers to accept new information about a service recovery provided by a company after experiencing a service failure.
Chapter 3: Consumers’ Willingness to Accept a Service Recovery

The service literature has made an important distinction between the notions of service failure and service recovery (Smith, Bolton, and Wagner 1999). A service failure occurs when a company fails to perform an initial service at the level that is normatively expected, whereas a service recovery represents the subsequent stage in which a consumer formulates a complaint and a company tries to redress the situation. The notion of service recovery has been identified as critical in the development of consumer-company relationship (Bitner, Booms, and Tetreault 1990), and it represents the context of this last experiment. Indeed, research suggests that a firm’s recovery effort can either reinforce the customer relationships and create a heightened loyalty, or worsen the initial failure and create an irrecoverable situation (Kelley, Hoffman, and Davis 1993; Maxham and Netemeyer 2002; Smith, Bolton, and Wagner 1999), a phenomenon also labeled as double deviation (Bitner, Booms, and Tetreault 1990). Building on this literature, I hypothesize that some consumers are more naturally predisposed to accept service recoveries, while others tend to be particularly insensitive to any forms of redressing efforts. Therefore, I expected that brand-incremental theorists, compared with brand-entity theorists, would more likely be affected by the service recovery attempt, a situation that would be translated into their purchasing intentions.

The importance of the fairness norm at the recovery level is well established (Smith, Bolton, and Wagner 1999; Tax, Brown and Chandrashekaran 1998), and consistent with this literature, I used the notion of fairness to qualify a company’s recovery attempt. Specifically, I referred to distributive fairness, interactional fairness, and procedural fairness, three judgments that have been found by social exchange theorists to strongly affect consumer responses after a recovery. Distributive fairness refers to the outcomes or the compensation received by a customer at the recovery stage, interactional fairness represents the manner in which employees treat and apologize to customers when the recovery is enacted, while procedural fairness refers to the recovery speed. Consistent with the general orientation of this research, I examined the moderation role of BII on the effects of unfair versus fair recovery attempts (in terms of distributive and interactional fairness) on consumers’ purchasing intentions.

Study 3: Using BII to Predict Reactions to a Service Recovery

Unlike the previous studies in which the new information was operationalized in terms of brand attributes (i.e., product price level, service quality level), in this study, the new information was operationalized in terms of a company’s service recovery attempt after the customer had experienced a service failure. As such, I designed a study to predict the willingness of individuals to accept a company’s service recovery (in terms of distributive and interactional fairness) and the likelihood that they will repurchase from the same company.

Method
Participants

Participants were 89 undergraduate students from a large northwestern university who earned partial course credit in an introductory marketing course. Students were told that they would participate in several unrelated research tasks for a period of 30 minutes.
The first task was the main study design and there were several other unrelated tasks in the research session. In the last task, the students responded to the brief BII and IPT scales and the scale items were averaged to form an overall BII ($\alpha = .85$) and IPT ($\alpha = .86$) indices.

Main Study

In this study, participants read a hypothetical scenario in order to determine how they would respond to a service recovery attempt by a haircut service after encountering a service failure from the same haircut service (cf., Maxham 2001). Specifically, all participants were asked to imagine that they initially experienced a service failure with the haircut service and subsequently the haircut service attempted to fix the problem by offering a service recovery. After reading the initial service failure, participants were randomly assigned to one of two conditions, based on the level of service recovery experienced (low versus high fairness). The low fairness condition was characterized as having low distributive and interactional justice, whereas the high fairness condition was described as having high distributive and interactional justice (appendix D).

Next, participants rated the extent to which they thought that the service recovery was fair using measures for interactional and distributive justice (Kau and Wan-Yiun Loh 2006). For the interactional justice measures ($\alpha = .92$) the participants responded to the following statements: “The hairstylist seemed very courteous to me and interested in helping me”, “The hairstylist tried hard to resolve the problem”, and “I felt that I was treated rudely”. In addition, for the distributive justice measures ($\alpha = .90$) the students responded to the following statements: “In resolving the complaint, the hairstylist gave me what I needed”, “The result of the complaint was not up to expectation”, and “Taking everything into consideration, the result was quite fair”. The future purchase intention measures were adapted from Maxham (2001) and administered at the end of the questionnaire. The purchase intention measures ($r = .91$) read: “I would have a haircut at this Haircut service in the future” and “There is likelihood that I would have a haircut at this Haircut service in the future”. All items were rated on a nine-point scale, anchored with (1) Strongly Disagree and (9) Strongly Agree; $\alpha = .95$. The measures of future purchase intention were then averaged to form the future purchase intention index.

Results

Manipulation Check

I had two scenarios that differed in terms of only the service recovery fairness (low versus high). The two conditions had the same service failure scenario. Participants rated the low service recovery scenario as having lower interactional justice ($M_{low} = 2.42$) compared with the high service recovery scenario ($M_{low} = 2.42, M_{high} = 8.30, F(1,87) = 589, p < .001$). Also, they rated the low service recovery scenario as having lower distributive justice ($M_{low} = 2.13$) compared with the high service recovery scenario ($M_{low} = 2.13, M_{high} = 8.04, F(1,87) = 548, p < .001$).
The Moderation Analysis

It was hypothesized that the BII would moderate the effect of service recovery on participants’ future purchase intention. In line with this hypothesis, a 2 (low fairness recovery versus high fairness recovery conditions) x 2 (BII: brand-entity theorists versus brand-incremental theorists) between-subject ANOVA on the future purchase intention reveals a significant main effect for the recovery conditions ($F (1, 85) = 91, p < .001$) and significant two-way interaction between the BII and the conditions ($F (1, 85) = 4.11, p < .05$). As illustrated in figure 3, in the high fairness recovery condition, brand-incremental theorists had significantly higher future purchase intentions compared with brand-entity theorists, $M_{\text{Entity}} = 4.82, M_{\text{Incremental}} = 6.47, F (1, 41) = 10.95, p < .05$, supporting the hypothesis. However, in the low fairness service recovery condition, brand-incremental theorists did not differ from brand-entity theorists in terms of their future purchase intentions, $M_{\text{Entity}} = 1.72, M_{\text{Incremental}} = 1.72, F (1, 42) = .87, p > .1$.

Furthermore, in line with the prediction, a 2 x 2 between-subject ANOVA on the future purchase intention reveals a non-significant two-way interaction between the IPT and the recovery conditions ($F (1, 85) = .14, p = .71$) and when I included the IPT as a covariate in the interaction analysis of BII and conditions, I found that the results did not change.

Figure 3
Discussion

As hypothesized, brand-incremental theorists were more likely to show higher purchase intentions than brand-entity theorists after a service recovery. It should be noted that this effect occurs only in the high fairness recovery condition. Although the service literature highlights that importance to perform a fair recovery to enhance a company’s relationship with its customers, the findings of this study bring a nuance to this belief. The brand entity theorists are less likely to revise their perceptions of a firm after a service failure, even if this incident is followed by a fair recovery. Given the “unforgiving” nature of the brand entity theorists, firms have to do everything in their power to minimize the occurrence of service failures, and to do “things right” at the service delivery stage. On the other hand, the results found for brand-incremental theorists are more encouraging. In their case, a fair service recovery seems to have the potential to restore the damages caused by a service failure.

Interestingly, I found no difference between the types of customers when the service recovery was perceived as low in fairness. This result can be explained by the fairness literature, which argues that consumers will respond in a particularly negative manner when they perceive to be the victim of a poor service recovery characterized by a low level of both distributive fairness and interactional fairness (Tax, Brown and Chandrashekaran 1998). In this case, a fair treatment cannot compensate for an unfair outcome, or vice versa (Brockner and Wiesenfeld 1996), and both types of consumers show little interest into continuing a relationship with the company.

General Discussion

This research offers a number of valuable insights into implicit theories of the brand, how they operate, and their effect on the evaluation of brands and future purchase intention. It is not uncommon for consumers to form an initial impression of a brand and later be exposed to information about the brand that does not match with their earlier impression. Obviously, this can be beneficial for a brand if the new information is more positive than the initial information, but it can be detrimental when the new information is more negative. The primary question I address in the present research is whether the impact of the new information might depend on individual differences in a consumer’s BII (i.e., the extent to which a consumer believes brands are relatively stable or are open to change).

To address the central question of this research, I first developed a unidimensional scale that is valid and reliable over time to assess individual differences in the BII (chapter 1), building on earlier work on IPT (Dweck, 1986). I then examined whether individual differences in the BII would impact how consumers responded to new brand information that did not match with their prior beliefs and we compared the effect of BII with that of IPT. Consistent with the hypothesis, brand-incremental theorists were more likely than brand-entity theorists to incorporate the new information (a change in price and quality) into their future purchase intention (chapter 2). However, the moderation effect of IPT was not significant; a result that supports the contention that BII is conceptually different from IPT. Lastly, in chapter 3, I showed that the brand-incremental theorists were more affected by the new information about a fair service recovery.
compared with brand-entity theorists. Taken together, these sets of studies offer new insights into how consumers respond to new brand information, extend work on implicit person theories in a new and applied context, and identify several directions for future research.

*Extensions of Literature on Branding*

Prior work suggests that among the pieces of information received earlier, only a subset of that information is salient and perceived as diagnostic/relevant influences judgments after a delay (Alba, Marmorstein, and Chattopadhyay 1992; Chattopadyay and Alba 1988; Feldman and Lynch 1988). In addition, negative information is found to be more salient, more memorable, and weighted more heavily in judgments than is positive information (Skowronski and Carlston 1987). Therefore, from the perspective of previous marketing work, when consumers encounter additional information that does not match with their initial judgments, the extent to which they retrieve the information received earlier and consider it relevant may depend on whether their initial evaluation was negative or positive (Muthukrishnan and Chattopadhyay 2007).

In the current research, I extended this finding by introducing another factor that affects whether individuals retrieve the information received earlier or consider the new information. That is, I believe that the BII provides another clear dimension to determine the extent to which individuals rely on their initial impressions or account for the newly introduced information in their brand evaluation. Therefore, the BII construct extends work on how consumers perceive brands and how they change their views of those brands.

*From Theories of People to Theories of Brands*

Dweck and her colleagues have found that people differ in the IPT they hold about the nature of human traits. That is, entity theorists are more likely to think of traits as immutable properties possessed by individuals. On the other hand, incremental theorists are more likely to treat labels as tentative descriptions subject to revision. Therefore, incremental theorists are more likely to rely on new information compared with entity theorists (Eberhardt, Dasgupta, and Banaszynski 2003).

Although several studies have examined the effect of implicit theories on beliefs about human traits, this current study employed a different approach of operationalizing these theories, which is distinct from the other existing studies. A theoretical contribution of the present research lies in highlighting the role of implicit theories in influencing how consumers evaluate brands based on newly presented information. In addition, another significant contribution of the research lies in the methodology used to distinguish between brand-entity and brand-incremental theorists. The authors presented a newly developed scale for the BII construct, which is unique to this research. This scale is comparable to IPT scale that is developed by Levy et al. (1998); however, the main difference between these two scales is that the IPT scale was developed to measure how individuals perceive the malleability of human traits, while the BII scale was simply developed to mirror the IPT and measure how individuals perceive the malleability of brand attributes. In addition, the authors demonstrated using a CFA and different
scenarios that IPT scale did not capture the same effect as BII did. Therefore, the authors believe that this scale will add a great contribution to the marketing and consumer behavior literatures because of its distinct and wide implications in these fields.

**Practical Implications**

Through these studies, I have shown the importance of the BII concept in terms of its ability to measure different constructs from such constructs as IPT, PFC, and BL and its ability to moderate the relationship between new brand information and future purchase intention. However, the intriguing question is how this is important to practitioners. I believe that these findings have practical importance because they determine whether managers will be able to change consumers’ brand images when the consumers have initial impressions about a brand. In general, managers should know that the extent to which consumers will learn the new information will be determined by the type of person the consumer is. That is, if the consumer is a brand-entity theorist, s/he will not be willing to incorporate the new information in her/his future purchase intention. However, if the consumer is a brand-incremental theorist, then s/he will be more influenced by the new information and will act according to it. Therefore, to determine if consumers will change their brand image, it might matter to a certain extent how loyal or disloyal consumers are, but a more important factor is whether these consumers are brand-entity or brand-incremental theorists.

Another important issue that I have not investigated in this research is whether individuals who are brand-entity theorists can learn to think like a brand-incremental theorist and vice versa. I believe that this is valuable because managers may try to change these consumers through marketing tools before introducing new brand information in a direction that benefits one’s own brand.

Therefore, managers must devote significant effort in understanding their consumers’ implicit beliefs concerning the malleability of their brand images and attributes and hence acknowledge the value importance of the BII scale. In the long run, marketing managers can save a lot of their marketing spending by studying their consumers’ implicit theory prior to presenting new information in their future messages. This is because if consumers are brand-entity theorists, managers will not be able to change these consumers’ beliefs about the brand by simply presenting improved information in their marketing messages.

Perhaps, the majority of Cingular customers might have been brand-entity theorists because advertising campaigns that were designed to change these customers’ prior beliefs about the company’s service quality did not seem to change their implicit image or simply because Cingular didn’t have the right message or didn’t make the right changes. Therefore, Cingular managers must find other effective techniques that would change their consumers’ prior beliefs, which in turn makes their marketing campaigns more objective and efficient for these types of consumers. Furthermore, the present research implies that the best prospects who are willing to accept new brand information are consumers who are brand-incremental theorists because these consumers are willing to incorporate new information about the brand in their future purchase decisions.
Limitations and Future Directions

As suggested in previous sections, the implication of implicit theories is huge. Researchers in social psychology have exhausted these theories to examine several important research questions and this trend is continuing in this field; whereas, in consumer behavior field, this trend has not started yet. The authors are optimistic that the proposed research may become the guide for future researchers in marketing and consumer behavior fields.

It is believed that the range of the research idea can be extended to other settings such as country-of-origin, brand extension, and other environmental and social welfare issues that are related to brands and are adopted by firms that have bad environmental and social reputations. Some of the important questions that researchers have not yet tackled are as follow: Will consumers be willing to buy brands that are known to be made in a country that is known for its poor (good) production quality when the brand has been produced in another country with good (poor) production quality? Will consumers be willing to accept brand extensions that are produced by the same company from which they buy products? Will consumers be willing to change their prior beliefs about a brand that is known to be environmentally unconscious after the brand has declared that it is following environmentally safe standards? These questions are some of possible research questions that add great contributions to the marketing and consumer behavior literatures. Hence, the authors encourage future marketing researchers to investigate these fruitful ideas in future research.

Finally and most importantly, although it is difficult for managers to change their consumer’s prior beliefs if their consumers are brand-entity theorists, future researchers should examine whether brand-entity (brand-incremental) theorists can learn to think like brand-incremental (brand-entity) theorists by priming them to think of brand attributes as malleable (nonmalleable) traits. This way, Cingular, Oldsmobile, and Wal-Mart managers might be able to enhance their brand image by teaching their customers to think of their brand attributes as changeable properties through marketing techniques that are designed specifically for this purpose.
APPENDIX A

The Full BII Scale Items:
1) In my opinion, a brand's image is something that doesn't change very much.
2) I typically don't change my perceptions about a brand if I have formed an earlier impression of that brand.
3) Many things about a brand can change, but my basic beliefs about that brand will not change.
4) In my opinion, the attributes of a brand are concrete and do not normally change.
5) My initial impressions about a brand can be changed*.
6) New information about a brand will not affect my core beliefs about that brand.
7) In my opinion, a brand's image is something basic that can't be changed over time.
8) A brand's core identity will always remain unchanged.
9) The beliefs I hold about brands aren't easily changed by new information.
10) I am unlikely to change my beliefs about a brand after forming my initial impressions of that brand.
11) There is not much that can be done to change my views of a brand.
12) Negative information about a brand will not change my impressions about that brand.

* These are reversed items; the bolded items are the brief BII scale items.
APPENDIX B

Study 1: Selected Pens for the Experiment Stimuli
A) High-Price Pens

**BIONDI EXCEPTIONAL BALLPEN**
This exceptional pen is crafted in solid 925 sterling silver with gold-plated details. The aviation theme is depicted in the 59 solid gold screws.
*Retail Price: $22.00*

**BIONDI TOWNSEND 10K GOLD ROLLERBALL**
The BIONDI Townsend 10K Gold-filled Selectip rolling ballpen is one of those perfect, timeless designs, a worldwide symbol of excellence and dependable performance.
*Retail Price: $20.00*

**BIONDI NOZAC WITH GOLD TRIM FOUNTAIN PEN**
The BIONDI Nozac’s large, 12-faceted barrel is crafted in unique marbled resins exclusive to BIONDI. Each pen features a luxurious, 24K gold-plated clip and band.
*Retail Price: $17.00*

**BIONDI USS CONSTITUTION BALLPEN**
This pen is a replica of the USS Constitution pen, which was handcrafted in wood taken from the oldest commissioned warship afloat in the world today.
*Retail Price: $25.00*

**BIONDI PINK LACQUER BALLPEN**
The BIONDI fun and feminine pink lacquer ball pen is finished with platinum-plated details and

**BIONDI RIFLESSI STERLING/BLACK BALLPEN**
The Riflessi ball pen from BIONDI features gleaming precious metal caps with an exclusive diamond-
topped with a pink color cabochon.
\[\text{Retail Price: $15.00}\]

B) Low-Price Pens

**BIONDI**

**ERASER**

Another perennial school supply favorite, the BIONDI Eraser Pen brings you style and elegance, plus a larger eraser! Black, blue, red Eraser Ballpoint Pen Writes at any angle and erases easily. Stainless steel point.
\[\text{Retail Price: $0.70}\]

**BIONDI**

**BLACK**

**BALLPOINT PEN**

The BIONDI classic design, translucent barrel for visible ink supply comes in black, blue, and red. A 1.2mm ultra smooth writing system gives this pen its desirable writing style.
\[\text{Retail Price: $0.80}\]

**BIONDI**

**RETRACTABLE PEN**

The BIONDI retractable pen with lubriglide ink system proves smooth writing at an economical price.
\[\text{Retail Price: $0.90}\]

**BIONDI**

**STICK PEN**

The BIONDI Stick Pen is the stick pen that everyone has used for years. With 49 different color combinations and a multi-color imprint, this pen is just the ticket for your everyday writing needs and budget.
\[\text{Retail Price: $0.70}\]

**BIONDI**

**STICK PEN**

The BIONDI Stick Pen is the world’s most loved pen. This pen gives smooth writing at an affordable price. It is an ideal pen for home and school. Perfect for situations where large pen quantity are needed. It comes in red, black, and blue.
\[\text{Retail Price: $0.80}\]

**BIONDI**

**ALLURE BALLPEN**

The rubberized barrels, hot neon trim, and brilliant chrome clips make this pen an all-time favorite. Imprint color will match neon trim color. This pen comes in different colors.
\[\text{Retail Price: $0.90}\]
APPENDIX C

Study 2: Condition Scenarios

A) Positive Initial Information/Negative New Information Condition

Initial Information

“Paul is a 23-year-old college graduate who just moved to a new city to get a job at a local company. Among other things, he needed to find a reliable Internet provider for his new apartment. Paul looked at the different options that were available in the market. After thinking about the options, he decided to go with FastNetwork, a local Internet provider. In addition, the company offered him a 30-day trial period as a service guarantee.

A few months later, Paul did not have any problems with his new FastNetwork service. In fact, he had a very good and pleasant experience with his Internet service. Also, he once had a question, and after calling the 800 number, the technical-support representative was very helpful and courteous in answering the question and Paul did not have to wait very long before getting to a technician.”

New Information

“After one year had passed, Paul decided to move to a bigger apartment for which he had to decide whether to continue the same Internet service with FastNetwork. Meanwhile, Paul read an independent consumer report on ConsumerReports.org website claiming that FastNetwork had the slowest and most unreliable Internet service compared with that of the other Internet providers for 2006. Also, he read that, relative to the other Internet providers, FastNetwork had the worst complaint record for 2006.”

B) Negative Initial Information/Positive New Information Condition

Initial Information

“Paul is a 23-year-old college graduate who just moved to a new city to get a job at a local company. Among other things, he needed to find a reliable Internet provider for his new apartment. Paul looked at the different options that were available in the market. After thinking about the options, he decided to go with FastNetwork, a local Internet provider. In addition, the company offered him a 30-day trial period as a service guarantee.

A few months later, Paul had several problems with his new FastNetwork service. In fact, he had a very bad and unpleasant experience with his Internet service. Also, he once had a question, and after calling the 800 number, the technical-support representative was very unhelpful and rude in answering the question and Paul had to wait very long before getting to a technician”.

New Information

“After one year had passed, Paul decided to move to a bigger apartment for which he had to decide whether to continue the same Internet service with FastNetwork. Meanwhile, Paul read an independent consumer report on ConsumerReports.org website claiming that FastNetwork had the fastest and most reliable Internet service compared
with that of the other Internet providers for 2006. Also, he read that, relative to the other Internet providers, FastNetwork had the best complaint record for 2006.”
APPENDIX D

Study 3: Condition Scenarios

Service Failure Scenario

“Suppose for a moment that you used ABC Haircut service for the first time. The cost of an ABC Haircut is US$18.00, and ABC is located 5 miles from your residence. You drove to ABC’s Haircut service and patiently waited (in the waiting area) for your appointment for 30 minutes. After you had received your haircut, you paid US$18.00 to the hairstylist for the cost of the haircut. In addition, you paid US$2.00 to your hairstylist as gratuity. Upon arriving home, you took a good look at your new haircut in the mirror. In doing so, you noticed that the hairstylist had done a poor job cutting your hair. Specifically, it appeared that your hair was at a large extent unevenly cut.”

A) High Service Recovery Condition

“Please recall the poor service you received from ABC Haircut service. Now, suppose that you returned to ABC to explain your problem. Upon doing so, the hairstylist carefully listened to your complaint. Afterwards, the hairstylist expressed a sense of compassion regarding the problem and apologized for the mishap. Further, the hairstylist immediately refunded your US$20.00 (US$18.00 for the haircut cost and US$2.00 tip). Moreover, ABC successfully fixed the problem (i.e., straightens your hair). Finally, ABC’s manager offered you a free haircut upon your next visit”.

B) Low Service Recovery Condition

“Please recall the poor service you received from ABC Haircut service. Now, suppose that you returned to ABC to explain your problem. Upon doing so, the hairstylist listened to your complaint, but did nothing to resolve the problem.”
REFERENCES


NOSTALGIA: 
HOW LOOKING TO THE PAST HELPS EASE US INTO THE 
FUTURE

Kate Loveland, Arizona State University

ABSTRACT

This research examines the conditions under which consumers experience an increased preference for nostalgic products, products that create a link with the past. I specifically test the hypotheses that preference for nostalgic products will increase during periods of life transition and when the social, as opposed to private, aspects of experience are emphasized. Through an experiment I am able to demonstrate that while there is not a significant main effect for life transition, preference for nostalgic products does increase when the social, as opposed to the private, aspects of experience are salient. Additionally, there is an interaction between life transition and social interaction such that the preference for nostalgic products is most pronounced when the social aspects of a life transition are made salient.

Recently I have begun to notice that toys and characters that were popular in my own childhood, Strawberry Shortcake, Transformers, and Teenaged Mutant Ninja Turtles for example, have once again begun to appear on the shelves of toy stores and in major motion pictures. As I began to wonder why these toys are being reintroduced and regaining their popularity now, twenty years after they first became popular, it occurred to me that those of us who loved these toys the first time they were introduced are beginning to become parents ourselves. It is widely acknowledge that the products we purchase often have a symbolic value (e.g. Nobel and Walker 1997; Schouten 1991; Belk 1988; Holbrook and Hirshman 1982). For parents who buy toys for their children that were popular during their own childhood these toys may serve as a link to the past and help to create shared experiences with their children.

This is just one example of how nostalgia, and products that stimulate a sense of nostalgia, can be used by individuals in periods of significant life transition, such as becoming a new parent, to create a sense of continuity and shared experience. This paper seeks to explore the circumstances under which nostalgic products, products that create a link with the past, take on greater value for consumers. Specifically, it is hypothesized that when individuals are faced with a major life transition they will have an increased preference for products that provide a connection to their past. In addition, by taking into account the distinctly social aspects of nostalgia, I am able to expand upon this hypothesis to propose that the preference for nostalgic products will be particularly pronounced when the social, as compared to the private, aspects of life transition are emphasized.

The idea that individuals will have an increased desire for the familiar during times of transition was first introduced by Davis (1979) as the discontinuity hypothesis. In the nearly thirty years since it was first introduced, the discontinuity hypothesis has been
explored in several studies although empirical support has generally been mixed at best (e.g. Best and Nelson 1985; Batcho 1998). I propose that this lack of consistent empirical support is due to the fact that, to the best of my knowledge, no previous study exploring nostalgia and life transition has accounted for the distinctly social aspects of nostalgia. This paper seeks to fill this gap by introducing an interaction between life transition (current life experiences versus a coming period of change) and social interaction (activities one experiences with others versus activities one experiences in private). When investigating the roll of nostalgic products it is important that the role of social interaction be taken into account since research has shown that personal narratives about nostalgic products almost invariably involve some kind of social interaction with a loved one (e.g. Wildschut et al. 2006; Holak and Havlena 1992). These earlier findings support the hypothesis that nostalgia is associated with social interactions. By accounting for the social aspects of nostalgic consumption, I am able to add to the literature by providing a more complete accounting of the role that nostalgic products play in the consumption experience.

Another weakness of these earlier studies of the discontinuity hypothesis which this paper seeks to address, is that these earlier studies used scales that test attitudes towards the past at the dependent variable (e.g. participants either agree or disagree with the statement: “In spite of what other people say, the lot of the average man is getting worse, not better”, Best and Nelson, 1985), rather than testing behavioral preference for nostalgic products. Consequently, another important contribution of this paper is that instead of using attitudes towards a historical past, which do not necessarily influence individual preferences, as a dependent variable, I am testing actual behavioral preferences for nostalgic as compared to current products. In this manner I am able to provide a more complete picture of how periods of transition shape actual consumption preferences, rather than simply attitudes towards the past.

**Nostalgia Defined**

Nostalgia as a phenomenon has a long and storied past. The word is based on two Greek roots: “nostos” meaning to “return to one’s native land” and “algos” meaning “pain suffering, or grief” (Sedikides, Wildschut and Baden 2004; Holak and Havlena 1992). The term was first used by the Swiss physician Johannes Hofer in his medical dissertation in 1688 (Baker and Kennedy 1994). Hofer used the term to describe fatal cases of depression brought about by extreme cases of homesickness among Swill mercenaries. Nostalgia continued to be defined as a medical disease throughout the 18th and 19th centuries; in the early 20th century the definition shifted from a brain disorder toward a psychosomatic disorder although it continued to be linked with homesickness (Batcho 1998; Sedikides, Wildschut and Baden 2004).

In the mid twentieth century the term “nostalgia” began to take on its current meaning which includes both positive and negative associations and began to be considered as distinctly different from homesickness. The *American Heritage Dictionary* defines nostalgia as “a bittersweet longing for things, persons, or situations from the past” (4th edition). Note the use of the term “bittersweet” in the definition which suggests that the term nostalgia as it is currently used implies both positive and negative associations
with the past and items associated with the past. In fact, recent investigations of nostalgia have shown that individuals generally associate more positive than negative feelings with the past when asked about nostalgia (Holbrook and Schindler 2003; Batcho 1995; Davis 1979). However, there does continue to be a bittersweet aspect to nostalgia as the feelings generated by nostalgia are for a period in one’s life that is no more and cannot be entirely recaptured, thus entailing a certain sense of loss (Holak and Havlena 1998). Building on this theme of nostalgia as a bittersweet sensation, this paper proposes that while nostalgia generally evokes positive feelings, it is often experienced during negative periods of one’s life such as during periods of transition or social isolation.

For my current purposes I will rely on a modified version of the definition of nostalgia proposed by Holbrook and Schindler (2003): A preference (general liking, positive attitude, or favorable affect) towards objects (people, places, or things) that were more common (popular, fashionable, or widely circulated) when one was younger (in early adulthood, in adolescence, in childhood, or even before birth). The main alteration in this definition from the original is that the original placed greater emphasis on preference for experiences from the past, while I emphasize objects from the past. It is important to note that this definition emphasizes the communal nature of nostalgia by noting that the preference is for objects that were common. This suggests that individuals from the same cohort (i.e. of the same age with similar demographic background) will likely feel nostalgic about similar objects.

**Nostalgia and Consumption**

Several studies, mostly by the Holbrook and Schindler team, have investigated how early experiences shape aesthetic tastes. These studies demonstrate that aesthetic preferences are often shaped by objects that were popular in one’s youth and that these preferences persist throughout one’s life. For example, they found that tastes for popular music peaks at the age of 24 (Holbrook and Schindler 1989). They also found that males prefer the “look” of female stars that were popular during their early adolescence, a time of sexual awakening in which strong sexual emotions are evoked for the first time creating a particularly strong bond (Holbrook and Schindler 1994). In another study which also found significant effects for men but not women, they found that early experience shapes consumer preference for automobile styles (Schindler and Holbrook 2003). In a study using psychoanalytic techniques, Braun-LaTour, LaTour and Zinkhan (2007) probed earliest memories and defining memories to gain insight into brand meaning. Their findings, like those of Schindler and Holbrook, suggest that early experiences help to shape preferences and that consumption decisions throughout an individual’s life are likely to be influenced by these early experiences.

One possible explanation for why early experiences shape aesthetic experiences is suggested by the findings of Escalas (2007). Escalas (2007) found that “narrative self-referencing persuades through transportation” (p. 421). Since consumers often have very rich self-centered narratives about nostalgic products (Wildschut et al. 2006) it seems probable that when nostalgic elements are used in an ad they are likely to cue these narratives, causing transportation and thus increased persuasion. In other words, a nostalgic product is desired not because of any intrinsic value in the object itself, but
because of the positive associations that the product has with one’s earlier experiences. Consequently, under circumstances in which positive associations with the past are particularly poignant (e.g. when one is feeling in some way threatened in the present) objects that provide a connection with one’s personal history should be increasingly desirable as they provide a medium through which one can be “transported” to an earlier period in their life.

**Discontinuity Hypothesis**

The discontinuity hypothesis, as first proposed by Davis (1979), states that nostalgia is an emotional response to a large scale change in an individual’s life. In other words, when people experience a disruption in their life, they will tend to rate the past more positively. In this research I take a somewhat different approach in that I believe that when primed to think about a coming disruption (i.e. major life transition) individuals will have a stronger preference for products that remind them of their past. This is an important distinction as earlier research has tended to measure nostalgia as a preference for the past, a preference that is not necessarily linked to actual consumption behaviors. I propose that life transition impacts actual consumption decisions by creating an increased preference for nostalgic products.

**Life Transition and Nostalgia**

Periods of transition are often marked by role ambiguity, social isolation and uncertainty about the future (Nobel and Walker 1997). This general sense of instability and uncertainty is likely to lead to changes in consumption habits as the individual attempts to define who they will be in this new stage in their life (Lee, Moschis, and Mathur 2001; Raymore, Barber, and Eccles 2001). At the same time, since the past is what is known, familiar, and safe, possessions from the past, or which remind one of a personal past, are likely to assume greater significance as they provide as sense of stability and security in an otherwise turbulent emotional environment. In general terms, it has been found that symbolic possessions seem to take on greater importance during times of transition as they can help ease the psychological difficulties associated with transition (Belk 1992; Schouten 1991).

Nostalgic items, which are items that remind an individual of a specific period of his/her past, can be particularly meaningful symbolic items. Nostalgia has been shown to serve several psychological functions including providing a repository for positive feelings (Holak and Havlena, 1988) and increasing social connectedness by increasing confidence in initiating interpersonal relationships (Wildschut et al. 2006; Routledge et al. 2006). These positive psychological functions of nostalgia suggest reasons why nostalgic products should be particularly desirable during times of transition. First, as a major life transition, such as that from college student to adult, is generally considered to be a stressful life event (Brissette, Scheier, and Carver 2002) individuals are likely to rely on a variety of coping techniques to help them through the transitional period with nostalgia acting as one such coping mechanism. As nostalgia is generally associated with positive experiences and emotions, nostalgic products are likely to be preferred during times of transition as a means to generate positive affect during the transitional period. Second, since periods of transition are marked by the adoption of new roles and creation
of new relationships (Lee, Moschis, and Mathur, 2001), nostalgia should be particularly appealing during these periods as it helps to increase confidence in initiating interpersonal relationships.

In addition, nostalgia should also produce a sense of connectedness with the past and a feeling of continuity as one transitions from one life stage to another. In periods of transition identity becomes destabilized and items that remind one of the past should aid in the maintenance or reconstruction of self-concept. In particular, nostalgic items serve as a marker of who one was in the past, including earlier goals, desires, and needs. Thus, nostalgic items serve as both a benchmark of who one used to be (a measure of change) as well as a symbol of continuity with the past.

Based on these many benefits associated with nostalgia, individuals experiencing a major life transition should demonstrate a greater preference for nostalgic products.

H1: When life transition is made salient, individuals will express an increased preference for nostalgic, as compared to contemporary, products.

It should be noted that while the first hypothesis follows from the discontinuity hypothesis, this hypothesis has for the most part not been supported in the literature (Sedikides, Wildschut, and Baden 2004). In particular, Best and Nelson (1985) who used archival data from four national sample surveys found only mixed support for the discontinuity hypothesis. In support of the hypothesis, they found that those who had experienced a transition indicative of deteriorating circumstances (e.g. death of a loved one, personal health problems, divorce) tended to display increased nostalgia. However, on the other hand they found no connection between other types of life transition, such as occupational interruption and geographical mobility, and nostalgia. I would argue that these mixed findings are due to two factors. First they failed to account for the social aspects of nostalgia. One possible explanation of their findings is that the death of a loved one and divorce both, by definition, represent the severing of a strong social bond which may account for increased nostalgia under these circumstances. Occupational interruption and geographical mobility, on the other hand, do not necessarily entail the severance of strong social bonds which may account for the fact that nostalgia does not increase under these circumstances. Second, the method employed provided no experimental controls and measured only attitudes towards the past as opposed to behavioral preferences. I address all of these issues.

The Need to Belong and Nostalgia

During periods of life transition individuals face uncertainty not only about what the future will hold but also about the kind of person that they will be, how well they will fulfill the needs of their new roll, and how they will create new social bonds. I hypothesize that during these periods of transition, nostalgic products serve two functions. First, they provide a sense of continuity and connection with the past which allows the individual to maintain a sense of self and to ease the transition into the new roll (Nobel and Walker 1997). Second, and the focus of this paper, nostalgic products help to establish a personal connection with others. Baumeister and Leary (1995), have
proposed that this need for personal connections, or the “need to belong” is one the fundamental needs driving human behavior.

While Baumeister and Leary (1995) are not the first to propose that individuals have an intrinsic need to feel connected to others (e.g. Freud, 1915/1963; Maslow, 1968; Bowlby, 1969) their theory is perhaps the most broad as it is proposed to be the underlying need driving a wide range of phenomena. The need to belong is defined as “the desire for frequent, positive and stable interactions with others” (Carvallo and Pelham, 2006) that is fulfilled through interactions with and acceptance from others.

Nostalgic products help to fulfill the need to belong in two ways. First, as previously noted, nostalgic memories often involve interaction with important others (e.g. Wildschut et al. 2006; Holak and Havlena 1992). Nostalgic products cue these memories, transporting the individual to a period of interaction with a loved one and thus fostering a sense of belonging. A second way in which nostalgic products foster a sense of belonging is through symbolic shared experiences from the past. Even though two individuals may not have used a product together in the past, or even known each other in the past, the fact that both independently used the product and associate it with the past creates a sense of shared experience and thus of social connection and belonging. Specifically, research has shown that individuals within a cohort (similar age group and social background) tend to have shared preferences for nostalgic products (Holbrook and Schindler 1989; Holbrook and Schindler 1994). Consequently, the preference for a specific nostalgic product helps to signal membership in a cohort and thus foster a sense of belonging to a specific group.

Because the need to belong is such a driving motivator in human interactions, it should be cued whenever social interactions are made salient. Since nostalgic products help to foster a sense of belonging, these types of products should be preferred when the need to belong is primed (e.g. when social interaction as emphasized).

H2: When social, as opposed to private, aspects of an experience are salient, individuals will express an increased preference for nostalgic, as compared to contemporary, products.

Interaction between life transition and social interaction

In addition to the main effects of life transition and social interaction on the desire for nostalgic products, I am expecting an interaction between these two factors. Specifically, I anticipate that the preference for nostalgic products will be strongest when the social aspects of a life transition are salient and weakest when the private aspects of current activities are salient. This is due to the fact that thinking about a coming transition threatens one’s sense of belonging, since new roles and relationships will have to be established, and thinking about social interactions primes the goal of needing to belong thus compounding the desire for products that foster a sense of belonging.

H3: There is an interaction between life transition and social interaction such that nostalgic products will be most preferred when the social aspects of a coming
interaction are made salient and least preferred when the private aspects of current experiences are made salient.

EXPERIMENT 1

The purpose of this experiment is to investigate the direct effects of both life transition and social interaction on the desire for nostalgic products. I expect that both life transition and social interaction will cause participants to experience an increased preference for nostalgic, as opposed to contemporary, products. This experiment further tests an interaction between life transition and social interaction. I expect that life transition and social interaction will compound each other such that preference for nostalgic products will be strongest when the social aspects of a coming transition are made salient.

Method

Participants were 74 students enrolled in a summer marketing course. College students were considered an appropriate group from which to draw our sample since Batcho (1995) found that nostalgia tended to peak in the 18-21 age group for most of the categories in her study (e.g. places, not having to worry, toys, having someone to depend on, etc.). Some participants received partial course credit for their participation in the experiment. Participants were randomly assigned to one of four conditions in a 2 (Life Transition: Current vs. Transition) x 2 (Types of Experiences: Social vs. Private) between subjects design. All subjects began by writing about their lives for four minutes. Life transition was manipulated by asking participants to write about either activities they currently participate in or about what they expect their life to be like in the months following graduation from college. Since all participants were college juniors or seniors, I determined that college graduation is an appropriate marker for life transition as most students’ lives do change dramatically after graduation and graduation is looming near enough to have some emotional resonance for participants. Participants were further asked to focus on either the social or the private aspects of the activities that they were writing about (see Appendix A for examples). After writing the essay, they completed the PANAS scale, which measures affect (Watson, Clark and Tellegen, 1988) and the Rosenberg (1965) ten item self-esteem scale.

After completing these scales, participants were told that they were going to watch a ten minute clip from a television show and asked to chose from a list of four possible shows. Of the four options, two were “nostalgic” shows that were popular when the participants were younger (late eighties to early nineties) and two were shows that are currently in production. The four television shows provided were chosen based on two pre-tests. In the first pre-test participants simply answered open ended questions by listing shows that they enjoyed “when [they] were younger” and shows that they currently enjoy watching. In the second pre-test liking and emotional attachment to the seven most common shows provided in both categories in the first pre-test were assessed. Shows chosen for the final experiment were both highly rated and showed little or no variation in preference based on gender. Saved by the Bell (first aired between 1989 and 1993) and The Fresh Prince of Bel-Air (first aired between 1990 and 1996) were chosen as the nostalgic shows and The Office and Grey’s Anatomy which both began airing in
2005 were chosen as the current shows. The selection of either a nostalgic or a current television show served as the main dependent variable.

After selecting a show, participants watched a ten minute clip of their chosen program. They next rated their selected program in terms of how much they enjoyed watching it, whether or not they will watch it in the future and their likelihood of recommending the show to a friend in the future. Participants then rated all four options in terms of liking and emotional attachment. They next completed a modified version of the Holbrook (1993) attitudes towards the past scale. While the items remained essentially the same, some of the wording was changed so make the scale more accessible to younger participants (e.g. “They don’t make ‘em like they used to” was changed to “Things used to be better in the past). Finally, participants answered basic demographic questions.

Results
Subjects
There were 74 total participants. Of these, 12 had not been raised in the United States and were thus eliminated from further analysis. This was done since the American television shows used as the dependent variable are not likely to have the same cultural relevance for individuals raised outside the United States as they do for those raised inside the United States. The remaining 62 subjects ranged in age from between 15 and 33 with 90% falling between the ages of 20 and 26. The sample was evenly divided between males and females.

Findings
Table 1 summarizes the findings from experiment 1. There was not a significant main effect for life transition on the type of show selected (chi-square (3) = 1.43, p > .20). Thus, hypothesis 1 is not supported. Given the relatively weak support that the disconfirmation hypothesis has received in the literature, this finding is not terribly surprising. There was, however, a significant main effect for social interaction (chi-square (3) = 12.06, p < .002). Specifically, participants were significantly more likely to choose a nostalgic video after writing about the social aspects of their lives than they were after writing about the private aspects of their lives. Thus, hypothesis 2 is supported. Finally, there also appears to be a significant interaction between life transition and social interaction (chi-square (3) = 13.52, p < .005). In fact, the only condition in which preference for nostalgic products exceeded the preference for contemporary products was the social/transition conditions. Of particular interest, it was found that while only 17% of participants writing about private aspects of their current lives chose to watch a nostalgic program, 71% of subjects writing about the social aspects of a coming life transition chose to watch a nostalgic show (see Figure 1). Thus, hypothesis 3 is supported.

I was able to rule out two other possible explanations for the findings: affect and self-esteem. Participants’ levels of positive emotion, as measured by the 10 positive items on the PANAS scale, did not significantly differ based on assigned condition (M = 4.92 for current private vs. 5.06 for current social vs. 5.43 for transition private vs. 5.56 for transition social, F (3, 58) = 2.02, p > .10). Participants’ levels of negative emotions,
measured by the 10 negative items on the PANAS scale, also did not vary significantly based on assigned condition ($M = 2.73$ for current private vs. 2.21 for current social vs. 3.20 for transition private vs. 3.04 for transition social, $F (3, 58) = 2.65, p > .05$). Finally, there were no significant differences in reported levels of self esteem, as measured by the 10 item Rosenberg (1965) self-esteem scale, based on condition ($M = 4.56$ for current private vs. 4.51 for current social vs. 4.53 for transition private vs. 4.45 for transition social, $F (3, 58) = 0.46, p > .70$). Therefore, the findings can be explained neither as the result of positive or negative affect ensuing from the manipulation nor on high versus low self esteem ensuing from the manipulation.

As earlier studies have predominantly used attitudes towards the past as the dependent variable when investigating nostalgia, I also ran an ANOVA with Holbrook’s (1993) attitudes towards the past scale as the dependent variable. The model was not significant ($F (3, 58) = 0.55, p > .06$) suggesting that life transition and social interaction have neither a direct nor an interaction effect on attitudes towards the past. I further found no correlation between attitudes towards the past and behavioral preference for nostalgic products ($r = .04, p < .70$).

Discussion

The results do not provide support for the first hypothesis, however, given that this hypothesis has not been strongly supported in the literature this finding is not terribly surprising. Of much greater interest is the fact that the results provide support for the second and third hypothesis, both of which emphasize the social role that nostalgic products play. Specifically, it was found that priming thoughts about social, as opposed to private, experiences increases the preference of nostalgic products. This provides preliminary support for the idea that nostalgia serves a distinctly social function.

The support for the third hypothesis perhaps offers the greatest theoretical interest. The strong interaction between life transition and social interaction provides one possible explanation for the weak support that the disconfirmation hypothesis has thus far received. Specifically, the disconfirmation hypothesis considered only the role that life transition would have on nostalgia without specifically considering the impact that the social aspects of transition would have on nostalgia. In this study I found that nostalgia, or the desire for nostalgic products, is highest when the social aspects of a life transition are emphasized. This finding helps to explain some earlier findings. For example, Sedikides et al (2004) classified Batcho’s (1995) finding that nostalgia tended to peak in young adulthood as “rather surprising[]”. However, in light of the current findings, when we consider that young adulthood is marked by what is arguably the most major life transition, that of child/minor to adult, as well as intense social interaction, including the finding of a mate, these findings are much less surprising. The current findings also help to explain the mixed results found by Best and Nelson (1985) since only those life transitions clearly involving the severance of social bonds were associated with increased nostalgia.

Finally, these finding provide an important step forward in that the results demonstrate circumstances under which actual behavioral preferences for nostalgic products could be expected to be highest.
products are impacted. Earlier efforts have measured attitudes towards the past as a surrogate for nostalgia that does not necessarily reflect behavioral preferences. Indeed, there was no relationship found between attitude toward the past and a preference for nostalgic products. In this study, I am able to demonstrate circumstances under which nostalgic products are preferred to contemporary products, regardless of how positively (or negatively) one views the past.

Future Research

There are two additional issues that I would like to explore in future research. First, I would like to empirically test the idea that nostalgic products do foster a sense of belonging. This would provide stronger support for the idea that nostalgic products are preferred when social interaction are cued because of a need to belong that is fulfilled by the nostalgic product. Second, given that nostalgic products do fulfill a need to belong, I would like to further explore how specifically these products meet this function.
REFERENCES


APPENDIX 1

Essay Topics

Condition 1 (Current/Private)
In the space provided please write a short essay about your life as it currently is. Write about a typical day in your life. Specifically, try to write about the private aspects of your daily life, when you are alone and away from friends, family members, and acquaintances. Feel free to write about both your positive and negative experiences.

Condition 2 (Current/Social)
In the space provided please write a short essay about your life as it currently is. Write about a typical day in your life. Specifically, try to write about the social aspects of your daily life, such as your interactions with friends, family members, and acquaintances. Feel free to write about both your positive and negative experiences.

Condition 3 (Transition/Private)
In the space provided please write a short essay about what you think your life will be like during the first few months after you graduate from ASU. As you are writing, think about the changes that graduation will lead to in both your personal and professional life. Specifically, try to write about the private aspects of this transition, such as the new experiences that you will have alone, away from friends, family members, and acquaintances. Feel free to write about both your hopes and your fears.

Condition 4 (Transition/Social)
In the space provided please write a short essay about what you think your life will be like during the first few months after you graduate from ASU. As you are writing, think about the changes that graduation will lead to in both your personal and professional life. Specifically, try to write about the social aspects of this transition, such as the new experiences that you will share with friends, family members, and acquaintances. Feel free to write about both your hopes and your fears.
Figure 1

The bar chart shows the count of condition for different categories:
- Current Private
- Current Social
- Trans. Private
- Trans. Social

The bars are divided into two sections:
- Nostalgic Show
- Current Show

The chart indicates a comparison between past and current experiences in various conditions.
SELF-BRAND OVERLAP AND DISSOCIATION IN COGNITIVE STRUCTURE

Rebecca K. Trump*

ABSTRACT
Brands play a significant role in consumers’ lives, often even acting as relationship partners. The cognitive processes underlying the bonds between consumers and their brands, however, are unknown. Research in social cognition has illustrated overlap in the cognitive representation of one’s self and a close other. Utilizing a response time methodology, the present research ties together these areas in an attempt to understand the relationship between brands and consumers’ self-schemas. It is found that beloved brands become incorporated into consumers’ mental representation of self (self-brand overlap), while disliked brands are dissociated from the psychological self (self-brand dissociation).

Brands are important. They are vital to companies because they provide a trademark that distinguishes their offerings from those of other sellers. They are important to consumers because they aid in shopping behaviors, providing a heuristic guide to the quality of products. More notably, however, brands are important in the lives of consumers as they serve as powerful tools that are used in the creation, maintenance, and expression of one’s self-concept (Belk 1988; Richins 1994; Sirgy 1982). It follows that consumers often prefer brands that have an image, or personality, consistent with their own (Aaker 1999) and, over time, consumers may actually develop relationships with the brands themselves (Fournier 1998). Further, Oliver (1999) proposes a bond between consumers and their brands called “immersed self identity”. In this case, it is suggested that a product or service becomes so entrenched in the consumer’s psyche that it actually becomes part of the consumer’s self and he or she cannot be whole without the brand. The objective of this paper is to understand the cognitive mechanisms underlying this bond between consumers and their brands.

While little is known in consumer research about the mechanisms underlying consumer-brand relationships, a growing body of literature in social cognition provides evidence that the people with whom one relates actually become part of that person’s cognitive representation of the self (e.g., Aron, Aron, Tudor, and Nelson 1991; Smith and Henry 1996). Given that brands may be perceived as relationship partners, and that relationship partners may be integrated into the self, we explore the logical implication that brands may be represented within the self-schema. Specifically, the goals of this paper are: (1) to present a logical argument for the overlap of brand characteristics and the self-schema; and (2) to test this hypothesis with an experiment that is closely modeled on the self-other overlap paradigm from the social cognition literature.
Theoretical Background

In this section, we first define the term self-schema, clarify how it is related to similar concepts, such as self-concept and psychological self, and briefly discuss how it is studied within the domain of social cognition. Next we review literature that provides evidence that perceived characteristics of relevant others are contained within the self-schema. Finally, we consider consumer research that supports the perspective that brands may be considered as relationship partners.

Self-Schema

A commonly accepted tenet of social psychology is that individuals have some sense of self. For each individual this is, essentially, what makes them, them. Further, self-concept captures people’s ideas about themselves and what they like (Gilbert, Fiske, and Lindzey 1998). Additionally, one’s self-schema refers to individuals’ mental models that bring together information about their selves (Markus 1977). It is a cognitive structure that organizes all of the information about one’s self, including autobiographical memory, beliefs, and affective information, in addition to notions of physical appearance, traits, goals, values, etc. (Fiske and Taylor 1991; Kunda 1999; Markus 1983). Self-schema is also referred to as one’s cognitive representation of self or the psychological self (e.g., Smith and Henry 1996). And, while many aspects of the self have been identified (e.g., multiple social identities, ideal and actual selves, etc.), we are taking the perspective that all perceived aspects of self are organized in the self-schema.

While the self-schema is conceptualized here as a holistic structure containing all information about the self, particular information within the self-schema may be more accessible to an individual at a given point in time. The self-schema is a network of associations about the self where the extent to which particular information is accessible can be due to individual or situational factors. Some traits are chronically accessible to particular individuals in every situation (Kunda 1999); for example, attractiveness may always be relevant to a beauty queen, while intelligence might be a chronically accessible trait for a brain surgeon. Situational cues can also trigger the accessibility of particular aspects of the self-concept. Take for example, a situation in which one’s interdependent self is salient (e.g., on a family vacation) versus an alternative scenario where the independent self is more accessible (e.g., a job interview). Hence, a variety of factors can affect what parts of the self-schema are more or less accessible in any given situation or for a particular individual.

Experimental research in social cognition relies heavily on response time measures to indicate the strength of associations in memory structure. For example, one of the early studies in social cognition to use response times showed that traits that were highly descriptive of the self were recognized by individuals more quickly than were moderately descriptive traits (Markus 1977), providing early evidence for the notion that some aspects of one’s self-schema may be more accessible than others. In the use of response times to understand the self-schema, it has been established that highly accessible self-schema information is reacted to more quickly (i.e., it is facilitated) while less accessible information is responded to more slowly (i.e., it is inhibited).
Self-Other Overlap

Work in social psychology has suggested that one’s psychological self does not exist in isolation (e.g., Aron et al. 1991). To illustrate this idea, consider the use of the word *we*. It is often used to describe ingroups or significant others (e.g., “we won the basketball game” or “we went on vacation”). This suggests that individuals do not view themselves as existing as strictly autonomous beings but, as social selves. Research in social cognition has striven to understand this idea of a socially extended self by attempting to assess whether people’s self-schemas may, in fact, overlap with their cognitive representation of external entities, such as ingroups and significant others (Aron et al. 1991; Smith and Henry 1996; Smith, Coats, and Walling 1999). Research on self-other overlap suggests that, if people feel they match a salient close other or an ingroup on a personality trait, they will be able to respond more quickly to whether or not that trait is descriptive of themselves than if they mismatch the other (Aron et al. 1991; Smith and Henry 1996; Smith et al. 1999). In other words, self-other congruence on a trait will lead to its facilitation while incongruence will cause it to be inhibited, indicating self-other overlap.

In these studies, participants were asked to perform pencil and paper tasks in which they assessed, on a 7-point scale, how descriptive a trait was of themselves and of the particular other(s) of interest. They were then to perform a computer task in which the same traits appeared on the monitor and they were to strike a key indicating whether or not that trait was self descriptive. Response times for these judgments were recorded and compared to the hard copy ratings task. As suspected, it was found that traits on which the individual was similar to the relevant other (i.e., the trait either did or did not describe both the participant and the other) were responded to faster on the computer task than were traits where self and other mismatched. In other words, traits that were congruent were facilitated (i.e., made more accessible) while incongruent traits were inhibited (i.e., made less accessible), suggesting that the cognitive representation of the other overlapped with people’s self-schemas. In all, this stream of research has found that people incorporate their ingroups into their selves (Smith and Henry 1996) as well as significant others (Aron et al. 1991; Smith et al. 1999).

Interestingly, Smith and Henry (1996) and Smith et al. (1999) also explored whether non-membership of an outgroup was part of people’s psychological selves, whereby the opposite effect would be seen (i.e., there would be an inhibition of consistent traits and a facilitation of inconsistent traits). However, they could not provide support for the notion that this type of dissociative mental representation existed. In fact, Smith and Henry (1996) suggest that the lack of an impact for the outgroup rules out priming as a potential cause of self-other overlap findings. They argue that, since both the impact of an ingroup and an outgroup were investigated, both were made salient yet only the ingroup effect was found, ruling out salience or priming as the cause of the effect. However, since the lack of significant effects can be attributed to a variety of other factors, the role played by priming in this research is not completely known.
**Brand as Other**

While work regarding relationships is prevalent throughout the marketing literature, within the last decade it has been fruitfully applied to the consideration of consumer-brand relationships (e.g., Fournier 1998). Brands have been identified as friends to consumers and even active relationship partners (Aaker 1996). To better understand this area of research and the interpersonal nature of brands more generally, we now review some of the particularly relevant findings.

Research in consumer psychology has found that individuals tend to think of brands in ways very consistent with how they think of other people. In other words, brands can be thought of in human-like terms, whereby personality traits are attributed to brands (Aaker 1997). And, not surprisingly, people often prefer brands with which they share personality traits (Aaker 1999).

Consistent with consumers’ tendencies to think of brands in the same way they think of other individuals, they apply norms of social interactions to their relationships with brands (Aggarwal 2004). More specifically, if a brand is deemed to have a specific personality trait, one expects that brand to behave accordingly. Take, for example, a friendship one has with an exciting individual. If that friend were to transgress on the relationship in some way, one would be less shocked and surprised than if a sincere friend behaved similarly. These exact same expectations are had of brands (Aaker, Fournier, and Brasel 2004). Further, consumers have been shown to interact with computers in ways similar to how they interact with people (Moon 2000). Again, norms of social interaction are applied whereby the consumer discloses more about him or herself when the computer (in the form of text on the screen) acts in a reciprocal manner and allows the relationship to build before asking detailed personal questions of the individual. Taken together, this provides evidence that brands, and consumption items more generally, are thought of in very similar ways as are individuals.

Additional evidence for the proposal that consumers have brand relationships that are comparable to their interpersonal relationships emerges in the similarities between brand related research in marketing and relationship research in psychology. Specifically, psychological research has found that individuals tend to be biased toward their beliefs about a romantic partner’s traits; whereby people in a close relationship rate their partner higher than the individual rates him or herself on a variety of interpersonal items (Murray, Holmes, and Griffin 1996). And, it has even been shown that a positive bias towards a relationship partner can actually lead one to turn the other’s fault into a virtue (Murray and Holmes 1993). Similarly, research in marketing reveals that consumers who are committed to a particular company are likely to be less affected by negative publicity regarding the company than are non-loyal consumers (Ahluwalial, Burnkrant, and Unnava 2000). Also, the type of relationship (communal versus exchange) a consumer has with a brand affects what information about the brand is highlighted when the consumer is processing relevant information (Aggarwal and Law 2005). Hence, the nature of a relationship between consumers and other individuals or brands affects the information that is attended to and how it is processed, in a very similar way.
Probably the most intriguing and influential finding is that consumers form extremely close relationships with brands (Fournier 1998). In this research, in-depth interviews revealed that women spoke of brands they used in their life as though they were friends or family members. Interestingly, these women not only expressed holding their brands up to social norms but also themselves, further highlighting the relational role brands play in consumers’ lives. Additional research reveals that consumers can form these strong bonds with brands in a variety of ways (Escalas 2004; Escalas and Bettman 2005; Moore, Wilkie, and Lutz 2002). Lastly, consumers have been shown to develop relationships with television characters (Russell, Norman, and Heckler 2004), providing further evidence that people experience consumption similarly to interpersonal relationships.

The above research focuses on consumers’ positive relationships with brands but, it follows that negative consumer-brand relationships may exist. While less is known about brand dislike amongst consumers, there has been some insight into the forms that it can take. Specifically, sources of brand dislike seem to fit into one of three categories (Dalli, Romani, and Gistri 2006): 1) consumer criticism and resistance, 2) brand dislike as a tool to construct and convey self image, and 3) sour consumer-brand relationships. In addition, Wilk (1997) suggests that consumer distastes and dislikes are extremely important because they are often more socially and personally important to the individual than is choosing to consume. Taken together, this indicates that consumers’ dislikes can perform many functions as well as allow for particular insight into the individual.

To summarize, consumers have complex and intricate feelings about consumption and, more specifically, brands. In particular, brands are thought of in very interpersonal and relational terms and, while most research focuses on the positive feelings consumers have towards brands, negative attitudes toward brands drive consumption decisions as well.

**Conceptual Framework: Self-Brand Overlap and Dissociation**

This research suggests that brands, which are often conceptualized by consumers as relationship partners, can be incorporated into people’s self-schemas. Specifically, since close others are incorporated into the self and beloved brands may be perceived as relationship partners, these brands can overlap with people’s cognitive representation of the self. This concept will be referred to as *self-brand overlap*.

Brand images and marketplace factors related to brands (e.g., competitors) are cognitively conceptualized by consumers in the form of network memory models (Keller 1993; 2003) which are, essentially, cognitive structures that organize all information about the brand (i.e., brand schemas). And, the cognitive organization of brand information has been previously studied using response times (Herr, Farquhar, and Fazio 1996). Hence, studying the association between the cognitive representation of brands and the self is not an unfounded leap from previous work.

This idea is far from foreign to consumer behavior research. For example, Belk (1988) proposes that possessions, in addition to close others, become part of an extended
self, however, a critique of this proposition is that there seems to be no way to know whether a possession is a part of an individual’s extended self or is simply important to the consumer (Cohen 1989). This research sheds light onto this issue by exploring the notion of self-brand overlap.

Empirical research in consumer psychology has explored similar ideas. Whether consumers view their possessions as being “me” or “not me” has been studied (Kleine, Kleine III, and Allen 1995). However, whether describing a product as “me” means it has been incorporated into the self-schema is unknown. And, it has been found that, while products enable individuals to pursue goals relevant to a particular social identity, the products themselves are not actually part of their identity (Kleine III, Kleine, and Kernan 1993). The present research expands upon our understanding of these notions by determining that brands can become incorporated into consumers’ self-schemas.

And, if brands can overlap with the self, they may also be dissociated from the self under alternative circumstances. If consumers have strong negative attitudes toward a brand, they may actively dissociate their self-concept from these brands. In other words, consumers will dissociate their psychological selves from disliked brands. This concept will be referred to as self-brand dissociation. However, this may beg the question of why we would suspect to find self-brand dissociation given that research on self-other overlap, as discussed previously, has shown that a trait’s connection with an outgroup does not affect its facilitation or inhibition (Smith and Henry 1996; Smith et al. 1999). But, it is important to note that not all outgroups create a desire to dissociate (White and Dahl 2007), and Smith and colleagues did not attempt to assess the cognitive representation of outgroups with which participants had a negative relationship but, simply outgroups more generally. Hence, these outgroups likely do not elicit adequately strong feelings to be relevant to one’s self-concept. Self-brand dissociation, on the other hand, would be expected to occur under instances of extreme negative attitudes toward a brand.

**Hypotheses**

**Positive Brand Relationships**

Given that close relationship partners and in-groups are represented in the self-schema, and brands may be considered relationship partners, we hypothesize that brands, particularly when made salient, may be represented in the self-schema. Hypothesis 1 is a straightforward extension of the social cognitive self-other overlap studies discussed previously (e.g., Smith and Henry 1996) whereby, traits that match the individual and the brand with which there is a positive relationship will be facilitated, while mismatched traits will be inhibited (as demonstrated by response times). In other words, we propose self-brand overlap between a consumer’s self-schema and a beloved brand.

H1: When a beloved brand is salient, consumers will respond more slowly to questions about their personal characteristics when these characteristics poorly match (versus closely match) the brand’s personality.
Negative Brand Relationships

Following in line with the notion that brands with which consumers have strong positive relationships overlap with the self-schema, an effect of negative brand relationships on people’s cognitive representation of self is suspected. Specifically, we propose that if a brand is disliked enough by a consumer (e.g., the consumer has a negative relationship with the brand), self-brand dissociation will be observed. In this case, traits that differentiate the individual from the brand will be facilitated, while traits consistent with the brand and the individual will be inhibited, suggesting that the brand is dissociated from the consumer’s psychological self.

H2: When a disliked brand is salient, consumers will respond more slowly to questions about their personal characteristics when these characteristics closely match (versus poorly match) the brand’s personality.

Method

Participants and Materials

Participants were 180 undergraduate students participating for course credit in an introductory marketing class. Five of the participants did not follow directions, leaving usable responses from 175 participants. The materials used were a list of 90 traits originally selected for Aron et al. (1991) experiment three (see appendix A for a list of the traits).

Procedure

The procedure replicates that used by Smith and Henry (1996). The study took place in a 40-person computer lab. Participants took part in groups ranging in size from seven to 33. Upon their arrival they were randomly assigned one of two packets, each containing seven pages of questionnaires. Following Smith and Henry (1996), participants first described themselves based upon 90 traits (Aron et al. 1991). Specifically, they were asked to rate themselves for each trait on a one to seven scale ranging from Extremely Like Me to Extremely Unlike Me. Next the participants read the manipulation information. This page contained the following overview of the Lovemark concept (Pawle and Cooper 2006): “Lovemarks are brands with which consumers feel emotional connections. Consumers have meaningful relationships with these brands. To further illustrate this concept, think for a moment, of brands like people. Some people you love, some you just like, some you are indifferent to, and some you actively dislike. Lovemark brands are thought of by consumers like people that they love.” Participants were then instructed that the goal of the study was better understand either (1) the Lovemark phenomenon, or (2) the opposite phenomenon: Hatemarks, which would be thought of by consumers like someone they actively dislike.

After reading this part of the manipulation, participants were asked to list some brands that would qualify as Lovemarks or Hatemarks for them, respectively. They then were to choose the one brand that best fit the criterion. Then participants were asked to describe the brand they just selected based upon the same 90 traits they previously rated for themselves. Specifically, they were asked to rate the brand for each trait on a one to seven scale ranging from Extremely Like the Brand to Extremely Unlike the Brand.
As in Smith and Henry (1996), after completing the questionnaire, participants were asked to turn to the computer task. They were told that they would now be rating themselves on 100 traits, most of which were the same as in the pencil and paper packet (10 additional traits were added to the beginning of the computer portion of the study as a practice session so participants could familiarize themselves with the task; the 90 traits of interest were presented in random order to each participant). Participants were told that the purpose of this portion of the study was that their pencil and paper ratings would be compared to their computer responses. In actuality, the purpose of the task was to measure response times for each of the self ratings. For each trait, participants were to press the right shift key on the keyboard if they believed the trait to be descriptive of them and to press the left shift key if the trait did not describe them. They were asked to respond as quickly as they could but not so quickly that they make errors. Once they completed the computer task they filled out a follow-up questionnaire and were thanked for their participation.

Results
Data Set Construction

Any missing values from the hard copy task were replaced with the participant’s mean (of the 31,500 self and brand descriptiveness data points, 50 needed to be replaced). And, response times outside of a 300ms to 5,000ms range were excluded (Ratcliff 1993). These missing values (129 out of 15,750) were replaced with the participant’s mean response time.

The primary independent variable of interest is the difference in the participants’ ratings of themselves and the brands they chose. This variable was created by squaring the difference of the two ratings for each participant on each trait, and will be referred to as self-brand congruence. This is different than the process used by Smith and Henry (1996), who dichotomized all self and other ratings and assessed whether the participants matched (i.e., fell on the same half of the scale as the other) versus mismatched the other. However, since we suspect that the extent to which the participant matches the brand on a given trait may have theoretical implications for the occurrence of self-brand overlap or dissociation (e.g., a perfect match on the scale has potentially different implications than does, simply, being somewhat near the brand on a given trait) we did not want to lose this information in our data analysis. Further, since the self-brand congruence needed to indicate the absolute perceived difference between the participant and the brand, as opposed to the direction of the difference, we needed to take the absolute value of the difference or square the difference. We chose to square the difference in creating our self-brand congruence variable because it would allow us to focus on the extreme cases, which is what we believe our application of the Lovemark and Hatemark concepts captures.

As in Smith and Henry (1996), other variables known to affect response times were included in the analysis as controls. In particular, people respond more quickly to a trait that is descriptive of them than to one that is not (i.e., yes responses come quicker than no). So, each participant’s absolute responses on the computer task were included in the analysis. Also, as discussed by Smith and Henry (1996), social desirability is likely to
play a role whereby participants are quicker to accept positive traits and reject negative ones, than they are to reject them and accept them, respectively. Therefore, the positive, negative, or neutrality of each trait was assessed by having 8 judges rate each trait on a negative one, zero, one scale (negative, neutral, positive). These ratings were then summed to get a continuous variable ranging from negative eight (e.g., Crude) to eight (e.g., Active) for each trait and this was included in the analysis as well.

Data Analysis Process

The analysis proceeded in 2 steps. First, estimates of the statistical relationship between perceived self-brand congruence and response times were estimated for each individual. Then, the between subjects analyses were performed.

Individual Self-Brand Congruence Coefficients

For each of the 175 participants, a standard least squares regression was run, with the unit of analysis being the participant’s response times and self-brand congruence as the particular independent variable of interest, with the other two variables (whether the participant responded yes or no to the trait and the extent to which the trait is positive or negative) included as controls. The estimated coefficients for each of these regressions represent the relationship between self-brand congruence and response times across the 90 items for each individual participant. In this analysis we included all 90 traits, independently, for each participant as opposed to using data reduction techniques. This is due to our desire to closely replicate the analyses used in the stream of self-other overlap research (e.g., Smith and Henry 1996). The self-brand congruence coefficients from each participants’ regression were used as the dependent variables in the between subjects analysis to test the hypotheses.

Hypothesis Tests

H1 and H2 suggest that participants in the Lovemark condition will have significantly greater self-brand congruence coefficients than those in the Hatemark condition. Furthermore, the self-brand congruence coefficients for participants in the Lovemark condition should be significantly greater than zero while they should be significantly less than zero for the Hatemark condition. A new data set was created and the self-brand congruence coefficients were the dependent variable for the second step in the data analysis process and the condition (disliked versus beloved brand) was the independent variable. A one-way ANOVA was then estimated to test the hypotheses.

Findings

The analysis shows an effect of Lovemark/Hatemark (F(1, 173)=13.02, p<.001). These results indicate that those in the Lovemark condition have higher self-brand congruence coefficients than do those in the Hatemark condition. H1 was tested by assessing whether the self-brand congruence coefficient is significantly greater than zero. The mean coefficient for the Lovemark condition is 5.67 which is significantly greater than zero (t(87)=3.21 (p<.001)). H1 is supported. Because the self-brand congruence coefficient is positive for participants in the Lovemark condition, this tells us that, as the perceived difference between the participant and the brand increases, response times increase as well and, as the difference decreases, response times are faster. In other
words, in the Lovemark condition, traits for which the participant and brand are similar to one another are facilitated while dissimilar traits are inhibited, providing evidence for self-brand overlap.

To test H2 we test whether the self-brand congruence coefficient is significantly less than zero. The mean coefficient for the Hatemark condition is -2.74, which is significantly less than zero (t(86)= -1.81 (p<.05)). H2 is supported. Because the self-brand congruence coefficient is negative for participants in the Hatemark condition, this tells us that, as the perceived difference between the participant and the brand increases, response times decrease and as the difference decreases, response times are slower. In other words, in the Hatemark condition, traits for which the participant and brand are similar to one another are inhibited while dissimilar traits are facilitated, providing evidence for self-brand dissociation.

Discussion
Research in social cognition has previously found that we incorporate close others into our psychological self (e.g., Aron et al. 1991). And consumer research has consistently provided evidence for the important role consumption and brands play in consumers’ lives (e.g., Fournier 1998). This research reveals that these separate streams of research can illuminate one another. Specifically, we find that when participants describe themselves on an array of traits, those that they share with a beloved brand are facilitated while those they do not are inhibited. The opposite effect occurs for traits related to a particularly disliked brand: shared traits are inhibited and distinct traits are facilitated. These results lead us to the conclusion that beloved brands become incorporated into consumer’s self-schema while disliked brands are dissociated from the self. Hence, we find support for the notions of self-brand overlap and dissociation.

Theoretical contributions to the social cognition literature
From the perspective of the social cognition literature, we show that self-other overlap extends to inanimate objects. Furthermore, we believe that this study is the first to provide evidence for the notion of self-other dissociation, which previous researchers failed to find (e.g., Smith and Henry 1996).

Another contribution of this research is that it rules out priming as the source of self-other overlap findings. Because we found significant effects for both self-brand overlap and dissociation, and in the case of dissociation, traits which were consistent between the consumer and the disliked brand were made less accessible as opposed to simply made salient or primed, we are able to more confidently conclude that priming is not the motivator of these results.

Theoretical contributions to the consumer behavior literature
From the perspective of the consumer behavior literature, we provide evidence of a cognitive mechanism underlying the concept of the self-brand relationship (Escalas 2004; Escalas and Bettman 2005; Fournier 1998). While self-brand relationships have been shown to be strong and complex, and even closely resemble interpersonal relationships, self-brand overlap and dissociation provides further understanding for why these
relationships exist and how they are cognitively represented. The parallel between self-brand overlap and self-other overlap provides evidence that self-brand relationships are cognitively represented by consumers in a similar fashion to relationships with close other individuals. And, just as with significant others, not only do consumers form close connections with brands but, the brands actually become a part of consumers’ selves.

**Implications for Marketing Practice and Future Research**

Self-brand overlap has important implications for marketing practice. First, research on the idea of self-other overlap has demonstrated behavioral consequences to feelings of oneness. Specifically, people’s feelings of oneness with another individual in need increase their willingness to help (Cialdini et al. 1997). In other words, when an individual feels an overlap between him or herself and another person, willingness to act in the other’s best interest increases. This sheds light on the suggestion that if a consumer identifies with a company he or she is more likely to be loyal to that company and even champion the firm and its products (Bhattacharya and Sen 2003). Expressly stated, self-brand overlap may mediate identification with a company and acting in the company’s best interest.

Along similar lines, it has been reasoned that people experience distress when a close relationship with another is dissolved due to an actual loss of a piece of their selves (Kenny and Acitelli 2001; Aron et al. 2004). Specifically, Kenny and Acitelli (2001) suggest that interpersonal relationships are held so dear and protected so strongly by those in the relationship because of the fear of a loss of self if the relationship were to end. As mentioned previously, research in marketing has found that consumers committed to a brand are less affected by negative publicity regarding that brand than are non-committed consumers (Ahuwalia, Burnkrant, and Unnava 2000). And, if consumer loyalty takes the form of “immersed self identity”, the brand becomes so entrenched in the consumer’s psyche that he or she cannot be whole without the consumption item (Oliver 1999). These marketing phenomena may be explained by self-brand overlap, whereby the consumer behaves in ways to maintain a relationship in order to avoid experiencing the loss of self that would occur if the bond with the company or brand were broken.

These are just some marketing findings that may be better understood through the framework of self-brand overlap. Future work can aim to guide marketing practitioners in how to entrench their brands in the consumer’s self-schema to create a level of consumer loyalty and devotion that is quite illusive.

Unfortunately, less is known about the ramifications of negative attitudes toward brands. Hopefully, self-brand dissociation can provide a framework for better understanding the nature of negative brand relationships and brand dislike, more generally. Future research on this topic could help us understand how and why self-brand dissociation occurs, what it means for marketing practice, and how to evade a brand becoming dissociated with consumers’ self-concepts.
# APPENDIX

**90 Traits from Aron et al. (1991)**

<table>
<thead>
<tr>
<th>Trait</th>
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<td>Active</td>
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WHEN BRANDS GO GREEN, PESSIMISTS DON’T FOLLOW: PERCEIVED SINCERITY AND THE IMPACT OF ENERGY SAVING CSR INITIATIVES ON CUSTOMER’S INTENTION TO SAVE ENERGY

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ABSTRACT

A considerable amount of research in corporate social responsibility (CSR) has focused on the impact of CSR initiatives on welfare of the company while overlooking that of customers. The present paper attempts to address this under-researched topic in the context of a popular CSR platform – environmentalism (energy conservation) – and two real brands (Toyota and Starbucks). Building on persuasion knowledge and brand loyalty literature, we test how a brand’s stated motive for its energy conservation efforts and brand loyalty influence consumers’ perceived sincerity of a brand’s intentions and its subsequent impact on their attitudes toward and intentions for energy conservation.

As many as 90% of Fortune 500 companies have integrated explicit corporate social responsibility (CSR) initiatives into their marketing actions, taking visible steps to communicate their socially responsible actions to consumers in hopes that consumers reward good corporate citizens through more sustained patronage (Lichtenstein, Drumwright, and Bridgette 2004). One of the most dominating CSR platforms of recent years is environmentalism, often referred to as “going green” (i.e., adopting more environmental friendly practices). This increasingly popular CSR initiative has been adopted as a marketing and advertising platform by major companies such as Honda, Toyota, GE, Starbucks, REI, Whole Foods, or Home Depot (Frazier, 2007; Makower 2008). Despite its wide adoption throughout corporate America, however, we know very little what impact such CSR efforts have on consumers. While some believe that greening of business helps consumers to become more green (Gunther 2007, 44), others are more skeptical, suggesting that such efforts distract consumers from such socially desirable movement by marketing “greenwashing” (Frazier 2007, 1). Given that corporate social responsibility refers to improving and protecting the welfare of a company but also that of a society as a whole (Lichtenstein et al. 2004), it is rather surprising that marketing research has yet to understand how CSR practices such as a firm’s environmentally friendly efforts affect consumers own socially responsible behaviors.

In the present article, we attempt to address this under-researched topic and examine how a brand’s socially responsible behavior (i.e., environmentalism) influences consumers’ own socially responsible attitudes toward and intentions for such brand-related behaviors (i.e., energy conservation). Specifically, we test how a brand’s stated motive for its environmentally friendly efforts and consumers’ brand loyalty influence consumers’ own attitudes toward and intentions for similar behaviors. Across two experimental studies with two different real brands (Toyota and Starbucks), we demonstrate that consumers perceive a brand’s environmental efforts as less sincere and
respond with less favorable attitudes toward and behavioral intentions for such effort when a brand acknowledges its purely public-serving motives only (e.g., helping the environment) for its environmental efforts than when it acknowledges both public- and firm-serving motives (e.g., helping the environment and attracting environmentally conscious consumers). However, this effect holds for less loyal consumers only but not those loyal to the brand. Brand loyal consumers tend to perceive environmental efforts of brands they use as sincere, responding with more favorable attitudes toward and intentions for such efforts than those less loyal and regardless of what motive the brand states. In support of persuasion knowledge model (Friestad and Wright 1994, 1995), these effects are mediated by consumers’ perceived sincerity of a brand’s intentions for its environmental efforts. A subsequent analysis of consumers’ cognitive responses revealed that less loyal consumers tend to use their lay beliefs about a brand’s ulterior motives (i.e., persuasion knowledge) when they perceive the brand’s explicitly stated motive as discrepant from their own beliefs. Brand loyal consumers appear disinclined to activate their persuasion knowledge regardless of a brand’s explicitly stated motive.

To attain the objectives of the present research, the remainder of the paper is organized as follows. First, we review pertinent literature in persuasion knowledge and develop our hypotheses on what role a brand’s stated motive plays in the relationship between a brand’s CSR intentions and its impact on consumers’ own socially responsible intentions. We then integrate findings from research on consumers’ processing of brand-related negative information to propose a second set of hypotheses on brand loyalty and its effect on persuasion knowledge. Finally, we present two experimental studies testing our hypotheses. We conclude with a discussion of the results and their implications for both research and practice.

THEORETICAL FRAMEWORK

The Role of Stated Motive

Recent research in CSR documents that consumers use persuasion knowledge (i.e., lay beliefs about marketer’s persuasion tactics and ulterior motives; Friestad and Wright 1994, 1995) when they cope with firms’ engagement in CSR initiatives (Becker-Olsen, Cudmore, and Hill 2006; Ellen, Mohr, and Webb 2000; Forehand and Grier 2003). This research suggests that when consumers can easily link the CSR initiative with some firm-related outcome such as a sale of a product (e.g., Dell supporting adult computer literacy programs), consumers are more likely to activate their persuasion knowledge particularly when the firm acknowledges public-serving motive only. Under such circumstances, consumers detect that a firm’s stated public-serving intentions are discrepant from their own beliefs about the firm’s true intentions (e.g., selling more personal computers), encouraging consumers to deem such tactics as deceptive or insincere and react with less favorable attitudes toward a given firm or brand.

Most relevant to the present research are findings by Forehand and Grier (2003) who showed that consumers activated their persuasion knowledge and evaluated a high fit fictional firm (i.e., high congruency between a brand’s image or its products and CSR initiative) less favorably when, for example, a computer manufacturer engaged in support of adult computer literacy programs for public-serving motives only (i.e., alleviate a
major problem in a society). In contrast, consumers were less likely to activate their persuasion knowledge and evaluated the firm more favorably when it stated both public- and firm-serving motives (i.e., alleviate a major problem in a society and simultaneously expand the market for the company’s software products). In this view, stating both motives reduced the discrepancy between a firm’s acknowledged motives and consumers’ own beliefs, making persuasion knowledge less accessible and, more importantly, less likely to be integrated into subsequent evaluative judgments. Consumers regard such intentions as more sincere and their attitudes remain unaffected by the persuasion knowledge (Campbell and Kirmani 2000; Forehand and Grier 2003).

In the present studies, we focus on real brands (Starbucks and Toyota) known for their support of environmentalism as well as their environmentally friendly products (i.e., high fit). As such, we posit that when such brands advocate their social responsibility (i.e., environmentalism) with a public-serving motive only (e.g., helping environment), consumers will activate their persuasion knowledge and perceive a brand’s intentions as less sincere, responding with less favorable attitudes toward and intentions for similar behaviors (i.e., energy conservation). When brands advocate their social responsibility with both public- and firm-serving motives (e.g., helping the environment while attracting environmentally conscious customers), however, consumers’ persuasion knowledge will be less likely activated. Consequently, consumers will perceive a brand’s intentions as more sincere and respond with more favorable attitudes toward and intentions for similar behaviors. Hence, we hypothesize:

H1: Consumers will (a) perceive a brand’s environmental intentions as less sincere and (b) respond with less favorable attitudes toward and intentions for energy conservation behaviors when the brand states public-serving motive only than when the brand states both public- and firm-serving motives.

Implied in this prediction is that perceived sincerity mediates the relationship between a brand’s stated motive and consumers’ attitudes toward energy conservation. This is consistent with prior research in persuasion knowledge, suggesting that insincerity is one of the outcomes of activated persuasion knowledge (Friestad and Wright 1994; Campbell and Kirmani 2000). Further, since attitudes are often predictive of behavioral intentions (Ajzen and Fishbein 1980), attitudes toward energy conservation should then mediate the relationship between perceived sincerity and behavioral intentions. Stated more formally:

H2: (a) The effect of a brand’s stated motive on attitudes toward energy conservation will be mediated by perceived sincerity and (b) the effect of perceived sincerity on behavioral intentions will be mediated by attitudes toward energy conservation.

The Role of Brand Loyalty

Although a brand’s stated motive affects activation of consumers’ lay beliefs about a brand’s ulterior motives (i.e., persuasion knowledge), consumers also vary in their
sensitivity to brand related information and often use their existing brand commitment or loyalty as a lens through which they make inferences about brand’s actions (Ahluwalia, Burnkrant, and Unnava 2000; Fournier 1998). Research examining how consumers with different levels of brand loyalty (i.e., psychological attachment to a brand within a product class; Fournier 1998) interpret brand related information illustrates that brand loyal consumers exposed to negative information about a brand they use avoid generating negative thoughts; instead, they focus on positive information and discount negative information. As a result, they are more likely to counter-argue information that challenges their initial attitudes and accept information that validates it (Pomerantz, Chaiken, and Tordesillas 1995), revising their attitudes on the basis of positive information even in the presence of negative information (Ahluwalia et al. 2000; Pullig, Netemeyer, and Biswas 2006). In contrast, less loyal consumers tend to perceive negative information as more diagnostic for making a revised evaluation of a brand. These consumers are less motivated to engage in processing and their cognitive responses are usually based on negative information (Pham and Muthukrishnan 2002; Pullig et al. 2006). For example, Ahluwalia et al. (2000) found that when brand loyal consumers were exposed to negative publicity about Nike’s shock absorption system, they did not change their attitudes toward Nike. In contrast, less loyal consumers considered negative information as more diagnostic and integrated it into their subsequent evaluations, resulting in less favorable brand evaluations. In sum, this research suggests that brand loyalty can insulate consumers from integrating negative information into their subsequent judgments and evaluations, making them less likely to revise their attitudes on the basis of negative information.

Consumers’ lay beliefs about a brand’s ulterior motives such as insincerity (i.e., persuasion knowledge) can be viewed as one such source of negative information. The research on brand loyalty then suggests that when this knowledge is activated, it will be perceived as more diagnostic for subsequent attitudinal responses but only for consumers who are less loyal to a given brand. In other words, preceding predictions related to the effect of a brand’s stated motive on attitudes toward energy conservation are more likely to be observed among consumers who are less loyal to a brand but not those loyal to the brand (H1). That is, less loyal consumers will be affected by a brand’s stated motive such that they will perceive brand’s intentions as less sincere and respond with less favorable attitudes and intentions when the brand states public-serving motive only (i.e., ulterior motives are more accessible) than when it states public- and firm-serving motives. In contrast, brand loyal consumers will focus on positive attributes of a brand related information (i.e., helping the environment) and perceive a brand’s intentions as sincere, responding with more favorable attitudes and intentions than those less loyal and regardless of a brand’s explicitly stated motive. Hence, we hypothesize:
H3: Brand loyal consumers will (a) perceive brand intentions as more sincere and (b) respond with more favorable attitudes and intentions than less loyal consumers. In addition, brand loyalty will moderate the relationship between brand’s stated motive and (c) consumers’ perceived sincerity and (d) attitudes and intentions. Specifically, less loyal consumers will perceive a brand’s intentions as less sincere, and respond with less favorable attitudes toward and intentions for environmentally responsible behaviors when the brand states public-serving motive only than when it states public- and firm-serving motives. Brand loyal consumers will perceive brand’s intentions as more sincere and respond with more favorable attitudes and intentions than those less loyal and regardless of a brand’s stated motive.

Consistent with our previous predictions, perceived sincerity should again mediate the moderation effect of brand loyalty on the relationship between a brand’s stated motive and consumers’ attitudes which in turn should mediate its impact on behavioral intentions. More formally:

H4: (a) The moderation effect of brand loyalty on attitudes toward energy conservation will be mediated by perceived sincerity and (b) the effect of perceived sincerity on behavioral intentions will be mediated by attitudes toward energy conservation.

Pretests
A series of pretests were conducted to (1) identify brands with high fit between their product line and environmentalism and different levels of brand loyalty, and (2) develop a magazine article intended to manipulate a brand’s stated motive. The objective of the first pretest ($N = 450$) was to identify appropriate brands. Undergraduate students in an introductory marketing class were asked an open ended question to list brands that they knew for their environmentalism as well as its environmentally responsible products (i.e., high fit). Toyota and Starbucks were listed most frequently (78% of all participants included these brands in their lists). While Toyota was listed to be known for its hybrid vehicles, Starbucks was known for its sustainable coffee products. Notably, Starbucks also provide wider distribution across brand loyalty as a great portion of participants (undergraduate students) will have some purchase history with either Starbucks or other local coffee shops. In contrast, Toyota is relatively less affordable to this population, making it an appropriate brand for an initial test of the main effect of a stated motive among less loyal consumers. A second pretest ($N = 382$) with different undergraduate students from an introductory marketing class showed that both of these brands had a relatively narrow distribution of attitude scores ($M_{\text{Starbucks}} = 5.37/7, SD = 1.22, \alpha = .98; M_{\text{Toyota}} = 5.38/7, SD = 1.30, \alpha = .99$).

In the third pretest ($N = 60$), we tested the main experimental stimuli - a magazine article - intended to manipulate a brand’s stated motive in a realistic and believable way. In addition, we used this test to verify that a brand’s actions were perceived as high fit and credible. We developed the article using published news articles from Fortune magazine, Business Week, and firms’ own websites (see appendix for all articles used in
the experiments). The final set of articles then referred to either Toyota or Starbucks as the target brand. In the public-serving motive only conditions, the article described the brand’s environmentally responsible behaviors with special emphasis on energy conservation motivated by a brand’s intentions to help the environment and did not make any reference to firm-serving benefits. In the public- and firm-serving motive condition, the article was identical but also stated some firm-serving benefits such as attracting environmentally conscious consumers. This procedure was adopted from Forehand and Grier (2003) who tested the effects of stated motive on evaluations of a firm.

In the pretest, participants were randomly assigned to one of the four articles in 2 (brand: Toyota vs. Starbucks) x (stated motive: public-serving motive only vs. public- and firm-serving motives) between subject design. After the participants read the article, they were asked to evaluate the brand’s motives as described by the article measured by a single item (Did the article describe Toyota's/Starbucks’ motive for its environmental actions as being driven more by its concerns for profits or environment: more by concerns for profits/more by concerns for environment), followed by perceived fit and credibility. Perceived fit was measured by a single item (How do you evaluate the fit between Starbucks/Toyota’s and its support of pro-environmental actions: very low fit/very high fit) and credibility by three items (not credible/credible, not believable/believable; not realistic/realistic). Both of these measures were adopted from prior research (Becker-Olsen et al. 2006). Finally, participants evaluated realism of the article measured by two items (not realistic/realistic, not believable/believable). All items were collected on a seven-point scale.

A series of two-way ANOVAs (brand x stated motive) with perceived stated motive, fit, credibility (α = .94), and realism (α = .98) as dependent measures were conducted. As expected, the main effect of stated motive was significant ($F(1, 59) = 61.46; p < .001$), suggesting that participants perceived that the article described a brand’s behaviors as driven more by environmental concerns in the public-serving motive condition only than in public- and firm-serving condition ($M_{public} = 5.67$ vs. $M_{public+firm} = 3.66$). The main effect of brand ($p = .79$) and a two-way interaction ($p = .44$) were not significant. Subsequent ANOVAs with remaining dependent measures of perceived fit, credibility, and realism did not reveal any significant main effects or two-interactions (all $p’s > .54$).

In sum, results of our three pretests suggest that identified brands (Toyota, Starbucks) and the magazine article were appropriate for testing the effects of a brand’s stated motive and brand loyalty on consumers’ responses to a brand’s environmentally responsible behavior.

**Experiment 1**

In experiment 1, we test the main effect of a brand’s stated motive for its environmental efforts on consumers’ attitudes toward and intentions to support energy conservation (H1) and whether these effects are mediated by perceived sincerity and attitudes toward energy conservation respectively (H2). We test these predictions in a simple between subject design with two stated motive conditions (public-serving motive only vs. public- and firm-serving motives) and among less loyal consumers (i.e., no purchase history with a brand). We use a magazine article describing Toyota’s
environmental efforts with special emphasis on energy conservation as an experimental stimulus.

**Method**

Participants, design, and procedures

Participants included fifty U.S. marketing undergraduate students (58.0% females, \( M_{\text{age}} = 21.70 \)) receiving course credit in a marketing class. The experiment was conducted on computers in a laboratory setting in groups of up to 12 students. Participants were randomly assigned to one of the articles describing energy conservation behaviors of Toyota with either stated public-serving motive only or stated both public- and firm-serving motives. The experiment was organized into three phases. In the first phase, participants read the article and then answered an open ended attribution question about participants’ thoughts about the brand’s motives for its environmental actions (as an additional measure for assessing activation of persuasion knowledge). After participants responded to this question, they completed measures of attitudes toward conserving energy, followed by a note that more questions will follow at the end of the session. In the second phase, participants completed an ostensibly unrelated survey for a local utility company that included behavioral intention measure. In the final phase, participants were instructed to recall the article they read earlier in the session and respond to measures of perceived sincerity about brand’s intentions, stated motive manipulation check, and a measure of repeat purchase behavior as well as some unrelated questions such as “List any specific information you recall from the article.”

**Stimuli and Measures**

**Stimuli**

A brand’s stated motive was a manipulated variable and consisted of explicitly stating public-serving motives only (e.g., to protect natural resources) or both public- and firm-serving motives for a brand’s environmentally responsible behavior (e.g., to protect natural resources and attract environmentally conscious customers).

**Dependent measures**

Attitudes toward conserving energy (\( \alpha = .88 \)) were measured by five items on a nine-point scale (In my own life, performing behaviors that conserve energy is: hard/easy, not enjoyable/enjoyable, worthless/worthwhile, useless/useful, not important/important). Behavioral intentions were measured by two items (\( \alpha = .70 \); How likely it is that you would purchase energy offsets/How likely it is that you would support local utility company to provide energy offsets) on 11-point scale with 0% (not likely at all) and 100% (certainly). We refer to this measure as intentions to support energy conservation. Finally, persuasion knowledge was assessed in two ways. First, participants responded to an open ended attribution question “Please list your thoughts about Toyota’s motivation for its environmental actions” (Campbell and Kirmani 2000; Forehand and Grier 2003). Following procedures used by Forehand and Grier (2003), participants’ responses to this question were coded as either firm-serving benefit attributions (e.g., attract customers, make money, make itself look good) or public-serving attributions (e.g., improve environment, decrease pollution). The rate of agreement among coders was 81% with an inter-coder reliability of \( \alpha = .74 \). Disagreements were resolved by discussion. The
difference between firm- and public-serving attributions was used as a measure of persuasion knowledge (hereinafter referred to only as firm-serving attributions). Second, participants reported their perceived sincerity of a brand’s behavior which consisted of a single nine-point item (How do you personally evaluate Toyota’s support of its pro-environmental actions: insincere/sincere). Perceived sincerity was used as a main indicator of persuasion knowledge. Firm-serving attributions were used as an additional cognitive measure of persuasion knowledge activation which enables more accurate detecting whether participants’ beliefs about a brand’s motives are consistent or inconsistent with a brand’s explicitly stated motive.

Manipulation check
To check on the stated motive manipulation, we asked participants whether the article described Toyota's motive for its environmental actions as being driven more by its concerns for profits or environment (1-more by concerns for profits/9-more by concerns for environment; Becker-Olsen et al. 2006).

Results
Prescreening for brand loyalty
Out of sixty participants, fifty participants (83.3%) had never owned a product made by Toyota. The remaining 10 participants who had already owned Toyota were dropped from the analysis.

Manipulation checks
To test whether the manipulation of stated motive operated as intended, we tested whether the means across the two stated motive condition differed from each other as well as from a scale mid-point of 4.50. The results of a simple t-test showed that participants in the public-serving motive only condition were more likely than those in the public- and firm-serving motive condition believe that firm’s motives, as described by the article, were driven by public-concerns ($M_{public} = 5.71$ vs. $M_{public+firm} = 4.31$; $t (1, 48) = 2.32, p = .02$). As expected, the mean for public-serving motive condition only was significantly greater than a scale midpoint ($M_{public} = 5.71$; $t (1, 23) = -2.60, p = .016$) whereas the mean for public- and firm-serving motive condition was close to a midpoint ($M_{public+firm} = 4.31; t (1, 25) = .50, p = .62$). These results suggest that the article manipulated stated motive successfully.

Consumers’ attitudes toward and intentions for energy conservation
In H1b, we predicted that consumers would respond with less favorable attitudes toward energy conservation and lower intentions to support energy conservation when the brand states a public-serving motive only than when it states both motives. Results of one-way ANOVAs with stated motive as a manipulated independent variable and attitudes and intentions as dependent variables revealed significant main effect of a brand’s stated motive on both attitudes toward energy conservation ($F (1, 49) = 10.49, p = .002$) and intentions to support energy conservation ($F (1, 49) = 5.72, p = .02$). As figure 1 illustrates, participants responded to Toyota’s energy conservation behaviors with less favorable attitudes when Toyota stated public-serving motive only ($M_{public} =
6.21 vs. $M_{public+firm} = 7.17$). Similar pattern was found for intentions ($M_{public} = 5.38$ vs. $M_{public+firm} = 6.79$). Thus, these results support H1b.

Figure 1. The Effect of Stated Motive on Attitudes and Intentions

![Figure 1](image_url)

Perceived sincerity

In H1a, we hypothesized that consumers will perceive a brand’s intentions as less sincere in the public-serving motive condition only than in public- and firm-serving condition. A one-way ANOVA with stated motive revealed a main effect of stated motive on perceived sincerity ($F (1, 49) = 10.97, p = .002$). Specifically, participants perceived Toyota’s intentions as less sincere when it stated public-serving motive only ($M_{public} = 6.25$ vs. $M_{public+firm} = 7.81$). Thus, these results provide support for H1a.

Mediational analysis

The main effect of a brand’s stated motive on perceived sincerity mirrors that of on attitudes toward energy conservation and intentions to support energy conservation. Thus, to test whether perceived sincerity mediates the relationship between a brand’s stated motive and consumer attitudes (H2a) and attitudes mediate the relationship between perceived sincerity and intentions (H2b). First, we conducted mediation analysis for perceived sincerity. According to procedures outlined by Baron and Kenny (1986), mediation would be implied if all of the following three conditions were met: (1) Stated motive significantly affected perceived sincerity, (2) stated motive significantly affected attitudes toward conserving energy, and (3) when both perceived sincerity and stated motive were regressed on attitudes toward energy conservation, the impact of stated motive would be attenuated, but perceived sincerity remain significant. As figure 2 displays, when controlling for perceived sincerity, the effect of a brand’s stated motive on attitudes toward energy conservation weakened and was not significant ($\beta = .25; t (1, 49) = 1.69, p = .10$) whereas the impact of perceived sincerity remained significant ($\beta = .30; t (1, 49) = 3.71, p = .001$). Thus, we find support for H2a.
Following similar procedures, second mediational analysis tested whether attitudes toward energy conservation mediate the relationship between perceived sincerity and intentions. Perceived sincerity had a significant impact on intentions ($\beta = .35$; $t(1, 49) = 2.08, p = .04$) as well as attitudes ($\beta = .36$; $t(1, 49) = 4.83, p < .001$) which in turn had an effect on intentions ($\beta = .76$; $t(1, 49) = 3.01, p = .004$). However, when controlling for attitudes, the effect of a perceived sincerity on intentions to support energy conservation weakened and was not significant ($\beta = .11$; $t(1, 49) = .55, p = .59$) whereas the impact of attitudes remained significant ($\beta = .66$; $t(1, 49) = 2.13, p = .04$). Thus, we find support for H2b.

Additional analysis

Recall that after participants read the article, they responded to an open ended attribution question about Toyota’s motives for its environmental actions. These responses were then coded as either public-serving or firm-serving attributions. The difference between firm-serving and public-serving attributions was then calculated as an additional measure of persuasion knowledge. We refer to this measure as firm-serving attributions and as a measure reflecting whether firm- or public-serving attributions dominated participants’ cognitive responses. In the context of perceived sincerity, we expect that lower perceived sincerity should emerge only when firm-serving attributions are inconsistent with a brand’s explicitly stated motive (as is the case when the brand states public-serving motive only; Forehand and Grier 2003). In support of this rationale, one-way ANOVA with stated motive did not reveal a main effect of stated motive on firm-serving attributions ($p = .94$). That is, the number of firm-serving attributions did not vary across stated motive conditions but was dominated by firm-serving attributions ($M_{public} = .38$ vs. $M_{public+firm} = .35$). Indeed, participants in the public-serving motive condition made firm-serving attributions even though participants were not explicitly cued to these attributions by the content of the article. This result provides additional

* $p < .05$, ** $p < .01$
All beta coefficients are unstandardized and based on contrast coding where (-1) is public-serving motive only condition and (+1) is public- and firm-serving motives condition.
support for consumers’ activation of persuasion knowledge, showing that consumers are more likely to make firm-serving attributions about a brand’s motives when the brand states public-serving motives only.

Discussion

In experiment 1, participants read a magazine article that described Toyota’s environmentally responsible behaviors with a special emphasis on energy conservation. We focused on a brand with which participants had no prior purchase history (non-loyal) and was identified by our pretests as a high fit and credible endorser of environmentally responsible behaviors. As hypothesized, when Toyota engaged in energy conservation behaviors stating its public-serving motive only, consumers responded with less favorable attitudes toward energy conservation and lower intentions to support energy conservation program. Consistent with H2, perceived sincerity about a brand’s intentions for energy conservation mediated the relationship between a brand’s stated motive and consumers’ own attitudes toward such behaviors which in turn mediated the relationship between perceived sincerity and intentions. Our additional analysis of participants’ firm-serving attributions then revealed that it was when participants’ firm-serving attributions were discrepant from a brand’s explicitly stated motive when they perceived such efforts as less sincere. This result provides additional support for participants’ activation of persuasion knowledge (i.e., lay beliefs about an agent’s ulterior motives). In experiment 2, we further extend these findings and examine a moderating role of brand loyalty on the relationship between a brand’s stated motive and consumers’ subsequent attitudes and intentions.

Experiment 2

In experiment 2, we test whether the relationship between a brand’s stated motive and consumers’ attitudes and intentions is moderated by brand loyalty (H3) and whether this moderation effect is mediated by perceived sincerity (H4). In addition, we intend to replicate findings from experiment 1 for less loyal consumers but with a different brand (H1-2). We test these predictions using the same magazine article but focus on a different brand, Starbucks, that provides wider distribution of brand loyalty.

Method

Participants, design, and procedures

Participants included sixty-two U.S. marketing undergraduate students (51.6% females, $M_{age} = 21.13$) receiving course credit in a marketing class. The experiment was conducted in the same laboratory setting as in experiment 1. Participants were randomly assigned to one of the articles in a 2 (brand loyalty: loyal x less loyal) x 2 (stated motive: public only x public and firm) between subject design. The procedures for experiment 2 were similar to those used in experiment 1. The experiment was again organized into three phases. The first phase was the same as in experiment 1. In the second phase, participants completed an ostensibly unrelated survey for university sustainability department that included behavioral intention measure. In the final phase, participants were instructed to recall the article they read earlier in the session and respond to measures of perceived sincerity about brand’s intentions, stated motive manipulation check, and a measure of repeat purchase behavior.
Stimuli and Measures

Stimuli and independent variables

Stated motive was manipulated as in experiment 1. As brand loyalty is often conceptualized as a form of repeat purchase behavior (Ahluwalia et al. 2000; Fournier 1998), we categorized participants into two different groups (loyal and less loyal) based on their responses to repeat purchase behavior questions. That is, participants who responded “yes” to a question “Do you purchase Starbucks’ products more than once a week?” were categorized as brand loyal whereas those who responded “No” were categorized as less loyal consumers. Following this procedure, the sample consisted of 30 participants in the brand loyal condition and 32 participants in the less brand loyal condition.

Dependent measures

Attitudes toward conserving energy ($\alpha = .84$) were measured by the same five items as in experiment 1. Behavioral intentions were measured by a single item asking participants whether they would be willing to volunteer for an on-campus environmental activity promoting sustainability one week after the experiment (0% - not likely at all/100% - certainly). We refer to this measure as willingness to volunteer. Persuasion knowledge was assessed using the same measures as in experiment 1 (perceived sincerity and firm-serving attributions about a brand’s intentions). The same coders used in experiment 1 were asked to code open-ended responses following the same procedures. The rate of agreement among coders was 86% with inter-coder reliability of $\alpha = .80$. Disagreements were resolved by discussion.

Manipulation checks

Stated motive was measured as in experiment 1 by a single item on a nine-point scale (1-more by concerns for profits/9-more by concerns for environment).

Results

Manipulation checks

A two-way ANOVA (brand loyalty x stated motive) with stated motive as a dependent variable showed a main effect of stated motive ($F (1, 61) = 9.24; p = .004$); participants perceived that the article described a brand’s motives as more environmentally concerned in public-serving than public- and firm-serving condition ($M_{\text{public}} = 6.07$ vs. $M_{\text{public+firm}} = 4.41$). As in experiment 1, the mean score for perceived stated motive in the public-serving condition was significantly different from the scale’s mid-point of 4.50 ($M_{\text{public}} = 6.07; t (1, 29) = 4.22, p < .001$) whereas the mean in the public- and firm-serving condition was close to a mid-point ($M_{\text{public+firm}} = 4.41; p = .81$). The main effects of brand loyalty ($p = .52$) and the two-way interaction ($p = .70$) were not significant. Thus, we concluded that a manipulation of stated motive was effective.

Consumers’ attitudes toward and intentions for environmental behaviors

As in experiment 1, consumers should respond with more favorable attitudes and intentions when the brand states both public- and firm-serving motives than when it states public-serving motive only (H1b). In addition, we predicted that this response should be
observed with less loyal but not with loyal consumers. These consumers should respond with more favorable attitudes and intentions than less loyal consumers (H3b) and regardless of a brand’s stated motive (H3d). These predictions called for main effects of stated motive and brand loyalty and a moderation effect of brand loyalty on the relationship between the stated motive and attitudes and intentions.

The results of two-way ANOVAs (brand loyalty x stated motive) with attitudes toward energy conservation and willingness to volunteer revealed a significant main effect of a brand’s stated motive on both attitudes ($F (1, 61) = 5.21, p = .026$) and intentions ($F (1, 61) = 7.69, p = .007$). In support of H1b, participants responded with less favorable attitudes ($M_{\text{public}} = 6.20$ vs. $M_{\text{public+firm}} = 6.95$) and willingness to volunteer when Starbucks stated public-serving motive only than when it stated both motives ($M_{\text{public}} = 4.97$ vs. $M_{\text{public+firm}} = 5.63$). The main effect of brand loyalty on both dependent measures was also significant; brand loyal consumers (relative to those less loyal) responded with more favorable attitudes ($M_{\text{loyal}} = 7.06$ vs. $M_{\text{less loyal}} = 6.15, F (1, 61) = 8.69, p = .005$) and greater willingness to volunteer ($M_{\text{loyal}} = 5.83$ vs. $M_{\text{less loyal}} = 4.81, F (1, 61) = 22.67, p < .001$). Thus, H3b was also supported. Finally, these main effects were further qualified by a significant two-way interaction on both attitudes toward energy conservation ($F (1, 61) = 4.74, p = .03$) and willingness to volunteer ($F (1, 61) = 12.97, p = .001$). As figure 3 shows, planned contrasts revealed that less loyal consumers responded with less favorable attitudes ($M_{\text{public}} = 5.46$ vs. $M_{\text{public+firm}} = 6.84, F (1, 58) = 10.30, p = .002$) and lower willingness to volunteer ($M_{\text{public}} = 4.13$ vs. $M_{\text{public+firm}} = 5.50; F (1, 58) = 21.05, p < .001$) when Starbucks stated public-serving motive only than when it stated both motives. However, no such effect was found among brand loyal consumers whose attitudes ($M_{\text{public}} = 7.04$ vs. $M_{\text{public+firm}} = 7.08, p = .94$) and intentions ($M_{\text{public}} = 5.93$ vs. $M_{\text{public+firm}} = 5.75, p = .57$) did not vary across the two motive conditions. Thus, H3d was supported.

Perceived sincerity

Similar to our predictions for attitudes and intentions, we argued that brand loyalty will moderate the effect of a brand’s stated motive on perceived sincerity. That is, the main effect of stated motive on perceived sincerity is qualified for those less loyal but not those loyal to the brand. Brand loyal consumers will perceive a brand’s efforts as more sincere than those less loyal (H3a) and regardless of a brand’s explicitly stated motive (H3c). A two-way ANOVA (brand loyalty x stated motive) revealed marginally significant main effect of stated motive ($F (1, 61) = 3.77, p = .057$); participants perceived Starbucks’ environmental intentions as less sincere in the public-serving motive only condition than in the public- and firm-serving motive condition ($M_{\text{public}} = 5.77$ vs. $M_{\text{public+firm}} = 6.47$). This result provides further support for H1a. The main effect of brand loyalty was significant ($F (1, 61) = 27.99, p < .001$). As figure 4 displays, brand loyal consumers perceived Starbucks’ intentions as more sincere than less loyal consumers ($M_{\text{loyal}} = 7.00$ vs. $M_{\text{less loyal}} = 5.31$), providing support for H3a. Finally, these main effects were further qualified with a significant two-way interaction between stated motive and brand loyalty on perceived sincerity ($F (1,61) = 5.57, p = .02$). Planned comparisons showed that less loyal consumers perceived brand’s intentions as less sincere only when the brand stated public-serving motive only ($M_{\text{public}} = 4.63$ vs.
\[ M_{public+firm} = 6.00, F (1,58) = 9.58, p = .003 \]. No such effect was found for brand loyal consumers who perceived Starbucks’ intentions as sincere regardless of its stated motive \( (M_{public} = 7.07 vs. M_{public+firm} = 6.94, p = .77) \). Thus, the moderation hypothesis H3c was supported.

Figure 3. The Moderation Effect of Brand Loyalty on Attitudes and Intentions

Figure 4. The Moderation Effect of Brand Loyalty on Perceived Sincerity

Mediational analyses

We again conducted a mediational analysis following the same procedure by Baron and Kenny (1986). That is, we test whether perceived sincerity mediated the moderation effect of brand loyalty on the relationship between stated motive and attitudes toward energy conservation (H4a) which in turn mediated the relationship between perceived sincerity and intentions to volunteer (H4b). First, we analyzed perceived sincerity, using
an ANCOVA model. This procedure calls for three steps. First, brand loyalty and stated motive must affect attitudes toward energy conservation. This step has already been demonstrated in an ANOVA analysis which revealed a significant main effect of brand loyalty \((F(1, 61) = 8.69, p = .005)\) and stated motive \((F(1, 61) = 5.21, p = .026)\). Second, brand loyalty and stated motive need to affect the potential mediator, perceived sincerity. The ANOVA results reported earlier revealed a main effect of brand loyalty \((F(1, 61) = 27.99, p < .001)\) and marginally significant main effect of a brand’s stated motive \((F(1, 61) = 3.77, p = .057)\). Finally, when the mediator is included in ANCOVA as a covariate, the interaction effect should weaken. The results of ANCOVA (brand loyalty x stated motive) with perceived sincerity entered as a covariate showed that the interaction became non-significant \((p = .46)\). The main effects of stated motive \((p = .21)\) and brand loyalty \((p = .49)\) were also not significant. These results suggest that perceived sincerity fully mediated the moderation effect of brand loyalty on the relationship between stated motive and attitudes toward energy conservation, providing support for H4a.

Second, we tested whether attitudes mediated the relationship between perceived sincerity and intentions, using a series of regressions as in experiment 1. First, perceived sincerity had a positive effect on both intentions \((\beta = .39; t(1, 61) = 5.33, p < .001)\) and attitudes \((\beta = .65; t(1, 61) = 8.92, p < .001)\). Second, attitudes had a positive impact on intentions \((\beta = .64; t(1, 61) = 10.32, p < .001)\). However, when controlling for attitudes, the effect of perceived sincerity on intentions weakened and was not significant \((\beta = -.06; t(1, 61) = -.73, p = .47)\) whereas the impact of attitudes toward energy conservation remained significant \((\beta = .70; t(1, 61) = 7.30, p < .001)\). Thus, we find support for H4b.

**Additional analysis**

As in experiment 1, we analyzed participants’ firm-serving attribution for additional support of persuasion knowledge activation. If less loyal consumers are more likely to activate their persuasion knowledge than those loyal to the brand, we expected a main effect of brand loyalty on perceived sincerity. Specifically, less loyal consumers should focus on firm-serving attributions as in experiment 1. Brand loyal consumers, however, should focus more on the positive information about the brand and therefore public-serving attributions should prevail among these consumers. A two-way ANOVA (brand loyalty x stated motive) with firm-serving attributions as a dependent measure revealed a main effect of brand loyalty; brand loyal participants generated significantly more public-serving attributions than less loyal participants \((M_{\text{loyal}} = -.40 \text{ vs. } M_{\text{less loyal}} = .78, F(1, 58) = 36.28, p < .001)\). As expected, the main effect of stated motive \((p = .31)\) and the two-way interaction \((p = .95)\) were not significant. These results suggest that less loyal consumers are more likely to activate their persuasion knowledge when a brand’s explicitly stated motive is discrepant from their own beliefs about a brand’s motive. Whereas brand loyal participants make public-serving attributions regardless of what motive the brand states. This latter result suggests that brand loyalty inhibits rather than activates persuasion knowledge.

**Discussion**

In experiment 2, participants again read a magazine article that described a brand’s environmentally responsible behaviors. Instead of Toyota, however, present experiment
used Starbucks, a brand that participants had either prior purchase history (i.e., brand loyal) or low prior history (i.e., less loyal). Similar to Toyota, Starbucks was identified by pretests as a high fit and credible endorser of environmentally responsible behaviors. In such a context, we tested whether brand loyalty moderates the relationship between a brand’s stated motive and perceived sincerity about the brand’s intentions and consumers’ attitudes toward and intentions for energy conservation. As such, experiment 2 extended the results of the first experiment in several ways.

First, we replicated results of the first experiment but with a different brand and a different behavioral intention measure. That is, consumers perceived Starbucks’ intentions as less sincere and responded with less favorable attitudes toward energy conservation and lower intentions to volunteer when Starbucks stated its public-serving motive only than when it stated both public- and firm-serving motives. Second, we find support for moderation effect of brand loyalty on the relationship between stated motive and consumers’ attitudes and intentions. Whereas less loyal consumers perceived Starbucks’ intentions as less sincere and responded with less favorable attitudes and intentions when it stated public-serving motive only than when it stated both motives. Brand loyal consumers perceived Starbucks’ intentions as more sincere and responded with more favorable attitudes and intentions than those less loyal and regardless of what motive Starbucks stated. The subsequent mediational analysis showed that perceived sincerity fully mediated these effects and attitudes toward energy conservation mediated the effect of perceived sincerity on intentions. Finally, our additional analysis of participants’ firm-serving attributions revealed that less loyal participants made firm-serving attributions about a brand’s motives even when no explicit cues were present in the article (i.e., stating public-serving motive only), providing additional support for participants’ activation of persuasion knowledge. In contrast, brand loyal participants made public-serving attributions regardless of Starbucks’ stated motive. Together, these findings suggest that brand loyal consumers seem much less likely to activate their persuasion knowledge when it comes to brands they like and use than those less loyal.

**General Discussion**

A great deal of marketing research documents how a firm’s socially responsible initiatives affects a firm’s own welfare while little attention has been paid to how such initiatives affect consumers’ own socially responsible behaviors. The present research attempted to bridge this gap by providing initial insights into this under-researched domain of CSR research. In our first study, we focused our attention on Toyota, a brand that was identified in our pretests as a high fit and credible endorser of environmental actions. When consumers read an article about Toyota’s environmental efforts, they perceived Toyota’s environmental efforts as less sincere and responded with less favorable attitudes toward and intentions to support energy conservation when Toyota acknowledged public-serving motives only than when it acknowledged both motives. Consistent with our prediction, perceived sincerity mediated the effect of a brand’s stated motive on attitudes which in turn mediated the effect of perceived sincerity on intentions. The analysis of participants’ cognitive responses revealed that perceived insincerity emerged when participants made firm-serving attributions and these attributions were discrepant from Toyota’s explicitly stated motive (i.e., public-serving motive only). This
finding provided additional support for activation of persuasion knowledge (i.e., lay beliefs about an agent’s ulterior motives) when the brand acknowledges purely pro-social motives only. In sum, this study extends findings such as those reported by Forehand and Grier (2003), showing that persuasion knowledge can also affect consumers’ own socially responsible behaviors (i.e., energy conservation).

In the second study, we then replicated findings of our first experiment but with another brand, Starbucks, that was also perceived as a high fit and credible endorser of environmentally responsible behaviors. More importantly, however, we found support for the moderating role of brand loyalty on the relationship between stated motive and attitudes. Less loyal consumers perceived Starbucks’ efforts as less sincere and responded with less favorable attitudes toward energy conservation and intentions to support energy conservation when it stated public-serving motive only than when it stated both public- and firm-serving motives. This effect, however, was not observed for those loyal to Starbucks. These consumers perceived Starbucks’ efforts as more sincere and responded with more favorable attitudes and intentions than those less loyal and regardless of a stated motive. This moderation effect of brand loyalty was fully mediated by perceived sincerity. The subsequent analysis of participants’ firm-serving attributions then revealed that brand loyal consumers generated more public-serving attributions than those less loyal who generated more firm-serving attributions. In sum, these findings suggest that brand loyal consumers seem much less likely to activate their persuasion knowledge and question brand’s motives than those less loyal. In contrast, less loyal consumers are more likely to activate their persuasion knowledge and question brand’s motives when such motives are discrepant from their own beliefs. These findings extend prior research in persuasion knowledge demonstrating that brand loyalty may be a potential boundary condition for persuasion knowledge and its impact on consumers’ attitudes. In addition, it contributes to research on brand loyalty. Present findings suggest that persuasion knowledge may be viewed as another source of negative information against which consumers can be insulated through brand loyalty.

From practical standpoint, these findings provide initial practical insights into how a firm’s socially responsible behaviors influence consumers’ own propensity to adopt similar behavior. The results reported in this article revealed that contemporary marketing practices which promote socially responsible initiatives with purely public-serving motives may be doing more harm than good. That is, when a brand (Toyota, Starbucks) acknowledges its public-serving motives only, consumers are more likely to activate their persuasion knowledge and perceive a brand’s environment efforts as less sincere, responding with less favorable attitudes and intentions to support such efforts. However, brands can inhibit this socially undesirable effect by taking a more sincere approach and acknowledge both public- and firm-serving motives which results in greater perceived sincerity and more favorable attitudes and intentions toward brand-related efforts. In addition, firms can also insulate consumers from these undesirable responses by building brand loyalty with its customers. Brand loyal consumers appear to perceive a brand’s actions as more sincere regardless of what motive the brand states.
These results provide important practical implications not only for brand managers but also for public policy makers. Recently, Sheth and Sisodia (2005) argued that marketing academics need to play a stronger role in steering marketing back toward a socially beneficial role. In their view, research needs to focus on better understanding consumers’ resentment at promotional tactics and the spillover effects it may have on safeguarding consumers’ goodwill. We attempted to provide some insights into one such spillover effect - the impact of a firm’s environmental or sustainable behavior on consumers’ own behaviors in such domains. Our studies suggest that consumers are sensitive to detecting discrepancy between their own beliefs about a brand’s motives and those stated by the brand. Policies could prevent such discrepancies by increasing firms’ awareness of these undesirable spillover effects and encouraging firms to state their firm-serving benefits (e.g., improving bottom line by energy conservation) along with their environmental claims. For example, a recent study by TerraChoice in 2007 which examined 1,018 consumer products bearing 1,753 environmental claims concluded that all but one made claims that are either demonstrably false or misleading, encouraging consumers’ skepticism about environmental claims made by such firms. In response to these findings, the U.S. Federal Trade Commission had announced that it would begin reviewing its environmental marketing guidelines for the first time in a decade (Makower 2008). Though much remains to be learnt about CSR impact on consumers’ own socially responsible behaviors, present studies suggest that marketing guidelines may integrate more honesty and transparency into its socially responsible claims to prevent consumers from perceiving such socially desirable efforts as insincere.

Limitations and Implications for Future Research

Present research focused on real brands, Toyota and Starbucks, and environmentalism (i.e., energy conservation). Though this context was motivated by researchers’ interest in practical implications, the results are inherently limited to this context. Future research needs to examine these effects in the context of other brands such as those that are not perceived as high fit or credible endorsers of environmental intentions. For example, brands or firms towards which consumers hold already high levels of skepticism (e.g., Wal-mart) may not be able to inhibit consumers’ persuasion knowledge even when it states both motives. For such brands, building loyalty may be one of the few options how to fight consumer skepticism. Yet another important empirical question is how more intimate connections with brands such as an emotional attachment to the brand (Thompson, MacInnis, and Park 2005) or self-brand connections (Escalas and Bettman 2003) affect activation of persuasion knowledge and its impact on consumers’ attitudes toward socially responsible behaviors endorsed by the brand. Present research examined only one dimension of these consumer-brand connections - brand loyalty. Future research may also go beyond environmentalism - a CSR domain that currently receives large media attention, possibly making it more susceptible to consumer skepticism due to high exposure. Investigating other socially responsible behaviors such as support of health-related causes, charities, or educational programs is another important venue for future research. Finally, our participants came from an environmentally conscious population. As indicated by our scores for attitudes toward energy conservation, participants’ responses were above the scale mid-point. Thus, using other socially responsible behaviors that a target population is not so conscious about
may provide even more compelling evidence for the undesirable impact of a firm’s stated motive on consumers’ own socially responsible behaviors.

CONCLUSION

Across two experimental studies with real brands, we provide consistent pattern of results, suggesting that current marketing practices that promote socially responsible initiatives with purely public-serving motives may not be very effective in persuading consumers to follow similar socially responsible behaviors. Although brand loyal consumers are relatively unaffected by such practices, it is clear that consumers in general did not follow neither Starbucks nor Toyota in their environmentally responsible behaviors. Though much remains to be explored, we believe that present results provide first steps toward better understanding of how marketing of socially responsible initiatives affects consumers in their own social responsibility. Whether firms manage to persuade consumers to follow similar socially responsible behaviors such as those endorsed by them may depend on their ability to foster brand loyalty among its customers or inhibit consumers’ persuasion knowledge by making consumers believe that their intentions are sincere.
APPENDIX - EXPERIMENTAL STIMULI

Toyota with stated public- and firm-serving motives

THE GREENING OF TOYOTA
FOR A BETTER and HEALTHIER PLANET

Did you know that replacing standard light bulbs with compact fluorescent light bulbs takes ears off the streets? Did you know that turning on your computer "sleep" mode takes hundreds of pounds of carbon dioxide out of the air and contributes to firm’s profitability? Did you know that Toyota has an environmental footprint team that searches for ways of reducing energy consumption and waste through the internal workings of Toyota’s offices and stores? Wondering why? To preserve natural resources, boost profit margins, and attract new customers.

According to U.S. Department of Energy, computers, office equipment, and household appliances and their inefficient use are driving America’s ever-increasing demand for more energy both at home and at work, making U.S. world’s largest contributor to greenhouse gas emissions. So, Toyota thought it would be nice to have office equipment turn "green" and start promoting more environmentally friendly practices throughout its offices and stores to decrease its energy consumption and unnecessary waste while increasing operational efficiency and attracting more environmentally conscious customers.

WHAT IS TOYOTA DOING? Toyota started to buy more renewable energy and to replace office equipment and lighting with their energy efficient alternatives to decrease its operating cost. Just by purchasing for one office an energy efficient computer, monitor, printer, and fax, Toyota is saving resources that would light an entire home for more than four years. By changing its lighting to compact fluorescent light bulbs, Toyota uses 66 percent less energy for its lighting, and produces only a tiny fraction of carbon dioxide emissions than if it continued using standard bulbs. Together, these pre-environmental moves added over 500 million dollars to its profit margins just in 2006 alone. In the same year, Toyota also managed to converge majority of its facilities (e.g., stores and offices) to reuse-able programs that include using electronic formats instead of paper-based communication and forms, and paper made of post-consumer waste instead of virgin paper, resulting in reduction of Toyota’s non-recyclable solid waste by more than two million pounds while, at the same time, making Toyota more attractive to environmentally conscious customers.

IS THIS ALL GOING TO MAKE A DIFFERENCE? Well, Toyota, concerned about conserving energy, recycling, and profitability, believes that it does make a big difference. Toyota actually hopes that people will take these “green” habits with them, to their homes, making others aware of how little effort it often takes to make a difference. It also believes that its actions will appeal to others, outside its “green” offices, making its product offerings more appealing to consumers, helping them realize that being environmentally friendly is a right thing to do for our future. So, the next time you leave your office, consider turning off your equipment to save some carbon and think about recycling to save some trees to help making the air cleaner and your firm’s profits little “healthier”. In the end, it is up to each one of us to determine how big of a footprint we will leave on this Earth and how much firms’ resources we waste.

HOW TO MAKE YOUR ENVIRONMENTAL FOOTPRINT SMALLER and FIRMS PROFITS HEALTHIER?

PROBLEM: US consumers use 890 pounds of virgin paper per person every year and recycle only 10% of all recyclable materials.
FOOTPRINT: 500 pounds of virgin paper consumes 1,500 pounds of wood, 15,000 gallons of water, and 30,000 Watts of energy more than production of recycled or post-consumer waste paper.
SOLUTION: Use recycled paper or paper made of post-consumer waste, re-use scrap paper for making notes, use electronic forms, and recycle to enable reuse.

RECYCLE & REUSE

PROBLEM: US consumers use 890 pounds of virgin paper per person every year and recycle only 10% of all recyclable materials.
SOLUTION: Use recycled paper at paper made of post-consumer waste, re-use scrap paper for making notes, use electronic forms, and recycle to enable reuse.

CONSERVE ENERGY

PROBLEM: A single office unit is 15,000 pounds of carbon dioxide due to idle electronic equipment, use of standard lighting, and energy inefficient appliances.
SOLUTION: Turn off electronic equipment when not in use or use energy-saving modes (e.g., computer sleep mode), use energy-bright equipment, and replace standard bulbs with compact fluorescent bulbs.

FOOTPRINT: Emission of 15,000 pounds of carbon dioxide requires 50 tons of various other resources such as water and oil.

THE REWARD
CLEANER AIR and HEALTHIER PROFITS

Toyota with stated public-serving motive only

THE GREENING OF TOYOTA
FOR A BETTER and HEALTHIER PLANET

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PROBLEM: A single office unit is 15,000 pounds of carbon dioxide due to idle electronic equipment, use of standard lighting, and energy inefficient appliances.
SOLUTION: Turn off electronic equipment when not in use or use energy-saving modes (e.g., computer sleep mode), use energy-bright equipment, and replace standard bulbs with compact fluorescent bulbs.

FOOTPRINT: Emission of 15,000 pounds of carbon dioxide requires 50 tons of various other resources such as water and oil.

THE REWARD
CLEANER AIR and HEALTHIER PROFITS
Starbucks with stated public- and firm-serving motives

The Greening of Starbucks for a Better and Healthier Planet at a Profit

Did you know that replacing standard light bulbs with compact fluorescent light bulbs takes cars off the streets? Did you know that turning on your computer “sleep” mode takes hundreds of pounds of carbon dioxide out of the air? Did you know that Starbucks has an environmental footprint team that searches for ways of reducing energy consumption and waste through the internal workings of Starbucks’ offices and stores? Wondering why? To conserve natural resources, boost profit margins, and attract new customers.

According to U.S. Department of Energy, computers, office equipment, and household appliances and their inefficient use are driving America’s ever-increasing demand for more energy both at home and at work, making U.S. world’s largest contributor to greenhouse gas emissions. So, Starbucks thought it would be nice to have office equipment that is “green” and start promoting more environmentally friendly practices throughout its offices and stores to increase its energy consumption and unnecessary waste while increasing operational efficiency and attracting more environmentally aware customers.

What is Starbucks Doing? Starbucks started to buy more renewable energy and to replace office equipment and lighting with their energy efficient alternatives to decrease its operating cost. Just by purchasing for one office an energy efficient computer, monitor, printer, and fax, Starbucks is saving resources that would light an entire home for more than four years. By changing its lighting to compact fluorescent light bulbs, Starbucks saves 60 percent less energy for its lighting, and produces only a tiny fraction of carbon dioxide emissions than if it continued using standard bulbs. Together, these pro-environmental moves added over 500 million dollars in profit margins just in 2006 alone. In the same year, Starbucks also monitored to converge majority of its facilities (e.g., stores and offices) to recycle-reuse programs that include using electronic formats instead of paper-based communication and forms, and paper made of post-consumer waste instead of virgin paper, resulting in reduction of Starbucks’ non-recyclable solid waste by more than two million pounds while, at the same time, making Starbucks more attractive to environmentally conscious customers.

Is this all going to make a difference? Well, Starbucks, concerned about conserving energy, recycling, and profitability, believes that it does make a big difference. Starbucks actually hopes that people will take these “green” habits with them, to their homes, making others aware of how little effort it often takes to make a difference. It also believes that actions will appeal to others, outside its “green” offices, making other people more environmentally concerned and active, helping them realize that being environmentally friendly is a right thing to do for our future. So, the next time you leave your office, consider turning off your equipment to save some carbon and think about recycling to save some trees to help making the air little cleaner and your firm’s profits little “healthier”.

The Reward: Cleaner Air and Healthier Profits

The Greening of Starbucks for a Better and Healthier Planet

Did you know that replacing standard light bulbs with compact fluorescent light bulbs takes cars off the streets? Did you know that turning on your computer “sleep” mode takes hundreds of pounds of carbon dioxide out of the air? Did you know that Starbucks has an environmental footprint team that searches for ways of reducing energy consumption and waste through the internal workings of Starbucks’ offices and stores? Wondering why? To conserve natural resources and help to make a healthier environment.

According to U.S. Department of Energy, computers, office equipment, and household appliances and their inefficient use are driving America’s ever-increasing demand for more energy both at home and at work, making U.S. world’s largest contributor to greenhouse gas emissions. So, Starbucks thought it would be nice to have office equipment that is “green” and start promoting more environmentally friendly practices throughout its offices and stores to decrease its energy consumption, save natural resources, and reduce unnecessary solid waste.

What is Starbucks Doing? Starbucks started to buy more renewable energy and to replace office equipment and lighting with their energy efficient alternatives to decrease its impact on environment. Just by purchasing for one office an energy efficient computer, monitor, printer, and fax, Starbucks is saving natural resources that would light an entire home for more than four years. By changing its lighting to compact fluorescent light bulbs, Starbucks saves 60 percent less energy for its lighting, and produces only a tiny fraction of carbon dioxide emissions than if it continued using standard bulbs. Together, these pro-environmental moves reduced Starbucks’ emissions by 500 million pounds of greenhouse gas just in 2006 alone. Starbucks also managed to converge majority of its facilities (e.g., stores and offices) to recycle-reuse programs that include using electronic formats instead of paper-based communication and forms, and paper made of post-consumer waste instead of virgin paper, resulting in reduction of Starbucks’ non-recyclable solid waste by more than two million pounds and saving over 25 million trees.

Is this all going to make a difference? Well, Starbucks, concerned about conserving energy, recycling, and protecting environment in general, believes that it does make a big difference. Starbucks actually hopes that people will take these “green” habits with them, to their homes, making others aware of how little effort it often takes to make a difference. It also believes that actions will appeal to others, outside its “green” offices, making other people more environmentally concerned and active, helping them realize that being environmentally friendly is a right thing to do for our future. So, the next time you leave your office, consider turning off your equipment to save some carbon and think about recycling to save some trees to help making the air little cleaner and environment little healthier. In the end, it is up to each one of us to determine how big of a footprint we will leave on this Earth and how much natural resources we waste.
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"CONFLICT AND COPING: AN INVESTIGATION OF CONSUMER CONFLICT IN NEGATIVELY CORRELATED CHOICE ENVIRONMENTS AND THE ROLE OF COMPROMISE PRODUCTS AS A MEANS OF COPING"

Gina S. Mohr*, University of Colorado

INTRODUCTION

The intrapersonal dilemma of choosing between what we should do versus what we want to do is often described as a test of human self-control in the midst of temptation. Also referred to as the “multiple-selves” problem, this dilemma is pervasive among consumers who must make tradeoffs between two attributes that fulfill two competing goals. Interestingly, there are currently many product offerings that are positioned as a means to approach each competing want (foods that are healthy and indulgent, clothing that is high quality and eco friendly, and cars that are safe and fun). Although these compromise products exist, it is not clear under what circumstances consumers will select such products and how consumption of these products influences subsequent product choice.

The proposed research investigates the motivations for and consequences of consuming compromise products. The thesis of this research asserts that decision makers are motivated to choose a compromise option in order to cope with decision difficulty in the face of the multiple-selves dilemma. Moreover, this research contends that the multiple-selves dilemma plays an important role in understanding the antecedents of decision conflict. The theoretical model below draws a proposed relationship between the multiple-selves dilemma, decision conflict and coping.

BACKGROUND

This research uses the multiple-selves dilemma to build a theoretical model that describes the antecedents of and motivations for coping with decision conflict. The multiple-selves problem is one way to more generally characterize intrapersonal dilemmas. Intrapersonal dilemmas exist when a person’s “different selves” have interests that conflict (Read & Roelofsma, 1999). These different selves have been partitioned in various ways across literatures. This research will use the broader characterization provided by the multiple-selves dilemma, which defines intrapersonal dilemmas as the internal inconsistency that exists when what a person wants to do is in disagreement with what he or she should do (Bazerman et al., 2005). The current research argues that the multiple-selves dilemma plays an important role in understanding decision conflict in negatively correlated choice environments.

Also referred to as an “unfriendly” choice environment, a negatively correlated choice environment is one that requires consumers to make tradeoffs between conflicting attributes (Shanteau & Thomas, 2000). Therefore, researchers often define decision conflict as the degree of negative correlation between attribute values (Bettman et al., 1993; Fasolo et al., 2007). Because a negative correlation implies that a product performing well on one attribute must perform poorly on another attribute, consumers
ordinarily must make a tradeoff between attributes. Where existing research suggests that having to make such tradeoffs gives rise to negative emotion and choice conflict (Bettman et al., 1993; Dhar, 1996; Einhorn & Hogarth, 1981; Fasolo et al., 2007; Payne et al., 1996), the proposed research asserts that the decision conflict arises when both the should and want self are active. The extent to which making such a tradeoff gives rise to decision conflict is predicted to be determined by the activation of the multiple-selves dilemma.

Little research investigates how individuals can solve, or at least cope with, the multiple-selves dilemma. The most widely cited coping mechanism stems from the literature on choice avoidance where consumers choose the status quo in order to avoid the negative emotion elicited by making tradeoffs between two valued goals (Luce, 1998). The proposed research recognizes that product offerings that combine attributes that address both competing goals can help consumers cope with decision conflict as well. In other words, while research to this point focuses on avoidance as a means of coping with the negative emotion arising from the cognitions surrounding difficult attribute tradeoffs, this research suggests that compromise products can provide consumers with an additional means to cope with difficult decisions.

For the sake of this research, a compromise product consists of two attributes; one consistent with a potential want of the decision maker and the other consistent with a conflicting should of the decision maker. For example, a very safe car (should) is assumed to rate poorly on performance (want); high fashion (want) is usually not associated with cost savings (should); and decadent taste (want) is often associated with poor health (should). Yet, products such as safe, high performance cars; low cost, high fashion clothing; and healthy desserts are all products that are currently offered in the marketplace.

The following model draws a theoretical relationship among compromise products, decision difficulty and the multiple-selves dilemma. In particular, this model will present the multiple-selves dilemma as moderating the relationship between negatively correlated choice environments and decision conflict. Finally, the proposed model also illustrates the use of compromise products to cope with this conflict.

RESEARCH MODEL AND HYPOTHESES

The proposed research model extends the literature on decision conflict in two ways. First, it examines how compromise products may be used as a means of coping with decision conflict. Second, this research explores the antecedents of decision conflict and proposes that decision conflict arises when both the want and should self of the decision maker are active. The multiple-selves dilemma shares conceptual similarities with both negatively correlated choice environments (conflicting attributes) and compromise products (conflicting attributes within one product). Therefore, theoretical parallels can be drawn among these concepts. The following section discusses these parallels in the proposed model and presents the primary research hypotheses.
The first component of the proposed model (see figure 1) is the relationship between decision conflict and coping. The coping behavior of interest in this research is the selection of a compromise product that allows consumers to approach two, conflicting attributes at once. For example, the choice between a decadent, but unhealthy, snack and a healthy, but less tasty one requires that a consumer must trade-off between the attributes of taste and health. Previous research suggests that difficult trade-offs may lead to decision conflict, and thus an increase in coping behavior (Luce, 1998). Given that a compromise option is available (a low-fat treat), consumers have a means to cope with decision conflict. I predict that as decision difficulty increases, the likelihood of choosing a compromise option, in order to cope with decision difficulty, will also increase. Formally,

H1: As decision conflict increases so too does the likelihood of choosing a compromise choice option over both the want and the should options.

Hypothesis 1 predicts choice but it does not predict whether the choice of the compromise option actually attenuates choice conflict. In order to investigate whether the choice of the compromise option attenuates decision conflict, one must assess felt conflict prior to and after choice. Specifically, when presented with a difficult tradeoff, measured ratings of decision conflict prior to making a choice will reflect the decision maker’s felt conflict at the time of the choice task. Measured ratings of decision conflict after making a choice will reflect the decision maker’s ability to cope with that conflict. The difference between the ratings of decision difficulty prior to choice, compared to ratings after choice, reveals the effect of the choice on decision conflict. Attenuation of decision conflict after choice suggests that the decision maker coped with the difficult choice. Because hypothesis 1 predicts that as decision difficulty increases, so too does the likelihood of choosing the compromise product, I predict that decision difficulty will be attenuated after the decision maker selects the compromise option.

H2: The choice of a compromise option will attenuate decision conflict.

Individuals may choose a compromise choice in order to cope with decision difficulty, but that is not to say that he or she believes that the choice will completely fulfill both selves. In fact, current research demonstrates that individuals tend to devalue products that contain multiple attributes. For example, Chernev (2007) illustrates one phenomenon where a product that contains several attributes is devalued when in the presence of other, more specialized products. Drawing from this research, it is predicted that when decision makers are conflicted between two items that dominate on competing attributes, the compromise option will be evaluated as moderate on both attributes by those individuals who choose the product.

H3: A compromise choice, consisting of two, negatively correlated attributes will be dominated by the should and the want options on their respective attributes.

Hypotheses 1 through 3 describe the circumstances under which consumers may choose compromise products and how these products are evaluated compared to want and
should options. Now I will develop a hypothesis that establishes the multiple-selves dilemma as a mechanism for conflict. The proposed model predicts that decision conflict is likely to arise in the presence of a negatively correlated choice environment, on average, but that this relationship is moderated by activation of the multiple-selves. More specifically, greater conflict is predicted to be experienced when both the want and the should self is active.

The current research advances research in the domain of decision conflict and coping by investigating the antecedents of decision conflict. In particular, it is not well understood why tradeoffs necessarily give rise to decision difficulty, and thus negative emotion. For instance, the question still remains, what characteristics make tradeoffs difficult? While, Luce (1998) would argue that a tradeoff becomes difficult when it involves making sacrifices on a highly valued goal, it does not address the notion that not all important goals are highly valued all the time. Because the multiple-selves dilemma exists when what somebody wants to do is in conflict with what they should do, it is predicted that only when the wants and shoulds of the decision maker are both active will the decision maker feel conflicted. In other words, when the multiple-selves are both active, and thus in conflict, the tradeoff between a want and a should is predicted to create conflict for the decision maker. This is formalized as follows:

**H4:** The extent to which both the want and the should self are active influences the effect of a negatively correlated choice environment on decision conflict.

Hypotheses 1 through 4 formalize the predictions made in the proposed model illustrated in Figure 1. The following section describes initial study findings in support of hypotheses 1 through 3.

**STUDY OVERVIEW**

Study one was conducted to test hypotheses one through three. This study investigates whether decision conflict predicts the likelihood of choosing a compromise choice, whether this decision conflict is attenuated by making the choice, and finally whether the compromise option is chosen despite it being rated as inferior on both
attributes dominated by the want and should options. The measurement of decision conflict and the effect of choice on decision conflict are critical in finding support for the above hypotheses.

The results of Study 1 provide several important insights. First, in support of hypothesis 1 the data reveal that as decision difficulty increases, so too does the likelihood that the decision maker will choose a compromise option. This contribution is important because it demonstrates that the compromise is not chosen as simply a means of having the best of both worlds, but rather it is chosen as a means of coping with a difficult decision.

Study 1 also demonstrates that, for those individuals who are faced with the multiple-selves dilemma, a product containing two, negatively correlated attributes can help resolve conflict. Specifically, while negatively correlated attributes, independently, give rise to decision conflict, inclusion of both attributes in one product allows consumers to confront the conflict. Furthermore, I demonstrate that the choice of such products significantly attenuates the feelings of decision difficulty arising from the difficult choice task. Finally, I demonstrate that compromise options are chosen despite the decision maker rating it as inferior to the want and should options.

**DISCUSSION**

The findings from the first study make significant contributions to further the understanding of the role of compromise products in coping with decision conflict. In subsequent studies the antecedents of decision conflict will be explored. In particular, the multiple-selves dilemma will be examined as a moderator in the relationship in negatively correlated choice environments and decision conflict.

This research advances the field of consumer research by investigating the antecedents of decision conflict and the effect of choosing a compromise product as a means of coping with decision conflict. The proposed model and research hypotheses provides a foundation for making these contributions.
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THE EFFECT OF TEMPORAL FRAMING ON PRODUCT CHOICE

Andrea Heintz Tangari* and Ronn J. Smith**, University of Arkansas

ABSTRACT

This paper examines how consumers respond to different temporal frames of savings. We show, in two studies, that the temporal framing of savings can have an impact on product choice, purchase intentions, attitudes, and perceptions of savings. We also examine how a person’s temporal orientation can moderate the effect of temporal framing of savings. Findings indicate that given a very small savings value for temporally proximal framings of savings, consumers have a relatively high evaluation of the product. Also, present oriented, but not future oriented, consumers appear to discount savings given the most distal and abstract temporal frame.

Consumers have to make a number of decisions that will incur some costs now in exchange for some future benefits. Often these future benefits are not completely clear or salient to the consumer. For example, consumers may pay more now for more nutritious food that will benefit their health in the future; this health benefit may not be very salient or may seem like an abstract benefit since the results could vary and might not be seen for many years. Another common example is that consumers may pay more for more energy efficient products that will save them in energy costs in the future, but many times the exact time frame and savings is ambiguous. Often, information regarding the products is rather vague regarding the savings that a consumer might incur. For instance, a product may claim to save a consumer a certain amount of money over the lifetime of the product, but fail to make it clear what the average lifetime of the product may be. Consumers are left with vague or abstract information that does not provide a clear picture of the costs versus the benefits of the product, making it difficult to make informed decisions.

This research focuses on the framing of a savings message on an energy efficient product, a CFL bulb. In two experiments, we examine the effects of three different temporal frames of savings (one month, one year and lifetime) on product choice, purchase intentions, attitudes and perceptions of savings. Additionally, we look to see if consumers’ temporal orientation (their predisposition toward future outcomes versus present outcomes) moderates the effect of the temporal framing of savings. Our conceptual framework is built around Construal Level Theory (Liberman and Trope 1998; Trope and Liberman 2003), which suggests people will respond differently to different temporally framed messages.

CONCEPTUAL FRAMEWORK

Temporal Framing and Construal Level Theory

Psychological distance, and thus abstraction, impacts thought and behavior such that evaluation and choice may be influenced whether or not primary, concrete characteristics or secondary, peripheral characteristics are used in decision making (Trope, Liberman, and Wakslak 2007). Research on the level of construal in decision making has led to the
formulation of Construal Level Theory (CLT), which demonstrates how people’s perceptions of proximal events are construed in lower-level, concrete terms; whereas distal events are construed in higher-level, abstract terms (Liberman and Trope 1998; Liberman, Sagristano, and Trope 2002; Trope and Liberman 2000, 2003). CLT can affect choice and preference such that a product that is favored in the near future, due to framing of specific concrete attributes, might not be favored in the distant future based on those same attributes. Conversely, products that may be favored in the distant future may be framed in terms of more abstract attributes, but the same product may not be favored in the near future.

CLT also posits that the value associated with distant future situations is increased over delay and the value associated with near future situations is discounted over delay. In the context of goal-directed activities, the desirability of an activity’s end state denotes high-level construal, while the feasibility of achieving this end state represents a low-level construal (Liberman and Trope 1998). This phenomenon has implications in two areas of importance for consumer behavior. First, it provides better insight as to how consumers discount utility over time. Second, it suggests that there are individual differences in consumer predisposition to focus attention on either present or future events.

Discounting plays an important role in how consumers view present and future outcomes (Frederick, Loewenstein and O’Donoghue 2002). One of the better documented discounted-utility phenomena is hyperbolic discounting. Hyperbolic discounting is characterized by a person having a declining rate of time preference. Thaler (1981) empirically demonstrated this phenomenon when asking research participants to quantify the amount of money required in a future time frame (one month, one year, ten years) in order to relinquish receiving $15 in the present. Thaler found that the median responses ($20, $50, $100, respectively) indicate an annual average discount rate of 345%, 120%, and 19%, respectively.

In their article regarding deferring versus expediting a consumption experience, Malkoc and Zauberman (2006) find that when consumers consider having an outcome in the present, which leads to concrete construal, then are asked to consider a delay of that experience, the initial concrete representations inhibit activation of downstream abstract representations that would be evoked via the delay framing. This leads to present-biased preference. When consumers consider having an outcome in the future, which leads to an abstract construal, then are asked to consider expediting that experience, the initial abstract representations inhibit activation of downstream concrete representations that would be evoked via expedited framing.

A person’s temporal orientation also has the possibility to play a role in how a person construes different events. Some have suggested that temporal orientation – a predisposition to focus one’s attention on the past, present, or future – influences subsequent behavior and can affect attitudes (Lasane and Jones 1999; Strathman, Gleicher, Boninger, and Edwards 1994b). In fact, temporal orientation has been considered a personality characteristic in extant research (e.g. Bearden, Money, and
Nevins 2006; Raynor and Entin 1982; Strathman, Boninger, Gleicher, and Baker 1994a; Zimbardo and Boyd 1999). Given the literature, we believe that a consumer’s temporal orientation can act as a moderator to the temporal framing of a product’s benefits and affect a consumer’s choice and perceptions regarding a product.

In the first study we examine how the temporal framing (one month, one year and over the lifetime of the bulb) of the savings of a CFL bulb influences purchase intentions, attitudes, and perceptions of savings. Given the research on CLT, indicating that people think in more concrete terms given proximal events compared to distal events, we predict that consumers will have higher evaluations regarding the CFL bulb in the temporally near savings message frames compared to the more abstract and temporally distant lifetime savings frame since savings is represented by a specific amount and should be a very concrete and salient attribute of the product. Also, given the discounting literature, we are particularly interested to see if consumers tend to discount the savings of the CFL bulb when given the more temporally distant and more abstract lifetime framing condition.

**STUDY 1**

**Method**

**Design**

A 3 (temporal framing of savings: one month vs. one year vs. lifetime) between subjects design was used.

**Procedure**

Data was collected using a paper and pencil survey. A total of 78 undergraduate research participants at a large Southern university completed the survey in exchange for modest course credit. The sample was 68% male with a mean age of 21.

Subjects were randomly assigned to one of the three experimental conditions. Subjects received a product sheet that showed a picture of a 60-watt equivalent CFL bulb in its packaging and were instructed to take some time to look over the product on the product sheet and to read the information presented on the package. The label on the CFL package differed across the three framing conditions and indicated the average amount of savings in one month, one year, and over the lifetime of the bulb one could expect if changing one bulb and all bulbs in their home to CFLs. Specifically, the temporal framing of savings used a label on the left side of the CFL bulb package that stated, “Save $0.55 per bulb in Just One Month ($6.40 in Just One Year / $45.00 over the Lifetime) and Save $22.55 in Just One Month ($262.40 in Just One Year / $1,845 over the Lifetime) by replacing all bulbs in your home.” There was an explanation near the bottom of the package stating how these values were calculated, which is similar to what is found on actual CFL packages.

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7 The packaging in all conditions included specifications (e.g., light output, energy used, expected bulb life) required by the US Department of Energy on all Energy Star certified CFL bulbs (www.energystar.gov). Savings listed are typical on current CFL packaging and are based on replacing one 60-watt incandescent light bulb with one 60-watt equivalent CFL bulb with electricity costs calculated at $0.12 per KWH and normal use of 3 hours per day. The figures listed for replacing all light bulbs were based on 41 light bulbs in the average US household (www.doe.gov).
The dependent variables included purchase intentions for the CFL bulb, attitude toward the CFL bulb and perception of savings from the CFL bulb. Purchase intentions was measured by asking participants, “How probable is it that you would purchase this CFL bulb, given the information on the package?” with bipolar endpoints of “Very unlikely/Very likely”, “Very improbable/Very probable” and “Very uncertain/Very certain” (α = .95). Attitude toward the CFL bulb was measured by asking participants “What is your attitude toward the CFL bulb?” with bipolar endpoints of “Unfavorable/Favorable”, “Negative/Positive” and “Bad/Good” (α = .95). Perception of savings was measured with the question, “The energy savings for the CFL bulb are substantial,” with endpoints of “Strongly disagree/Strongly agree”.

**Results**

**Manipulation checks**

To assess if participants viewed the temporal framing of savings as providing savings at different times we asked participants, “For the CFL bulb, how soon would you save on electricity costs based on the information on the package?” with endpoints of “In the immediate future/In the distant future” and “Months from now/Years from now” (α = .83). An ANOVA indicated that the temporal framing of savings conditions were significantly different (F=13.05, p < .001) and follow up contrasts comparing each of the three conditions show that they are all significantly different from each other (p’s < .05) and in the correct direction.

**Analysis of predictions**

To analyze our prediction that consumers evaluations will be more positive in the temporally near savings frames compared to the temporally distal savings frame we ran 3 (temporal framing of savings: one month vs. one year vs. lifetime) ANOVAs on the dependent variables purchase intentions, attitude toward the CFL and perception of CFL savings. A table of the means is presented in Table 1.

<table>
<thead>
<tr>
<th>Temporal Frame</th>
<th>1 Month&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1 Year&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Lifetime&lt;sup&gt;c&lt;/sup&gt;</th>
<th>F-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings</td>
<td>5.72&lt;sup&gt;c&lt;/sup&gt;</td>
<td>5.61&lt;sup&gt;c&lt;/sup&gt;</td>
<td>4.33&lt;sup&gt;a,b,d&lt;/sup&gt;</td>
<td>10.83*</td>
</tr>
<tr>
<td>CFL Attitude</td>
<td>5.88&lt;sup&gt;c&lt;/sup&gt;</td>
<td>5.74</td>
<td>5.20&lt;sup&gt;a,d&lt;/sup&gt;</td>
<td>2.43</td>
</tr>
<tr>
<td>Purchase Intentions</td>
<td>5.08</td>
<td>5.31&lt;sup&gt;c&lt;/sup&gt;</td>
<td>4.42&lt;sup&gt;b,d&lt;/sup&gt;</td>
<td>3.16**</td>
</tr>
</tbody>
</table>

*p < .001, **p < .05.

Note: Superscript letters indicate significant differences for follow-up contrasts between the different temporal framing conditions. For example, perception of savings is significantly different in the 1 month condition compared to the lifetime condition (p < .05). The superscript “d” indicates that the 1 month and 1 year conditions combined are significantly different (p < .05) from the lifetime condition.
The effect of temporal framing of savings on perception of savings

The temporal framing of savings did significantly influence perceptions of savings \((F = 10.83, p < .001)\). Contrasts indicate that there was not a significant difference between the one month and one year frames \((p > .60)\). The one month \((M = 5.72)\) and one year \((M = 5.61)\) frames were significantly higher than the temporally distant lifetime \((M = 4.33, p < .001)\) frame indicating that subjects had higher perceptions of cost savings in the one month and one year frames compared to the more distal and abstract lifetime frame. This is consistent with our prediction and seems to indicate that consumers are discounting the savings given a more distal savings frame.

The effect of temporal framing of savings on attitude toward the CFL bulb

The temporal framing of savings did not significantly influence attitude toward the CFL bulb \((F(2, 73) = 2.43, p = .09)\) although we did see the means go in the expected directions such that attitude means decreased as the temporal distance of the framing of savings increased. Based on the directionality of this result, follow-up contrasts were conducted that indicate that attitudes decreased from the one-month frame \((M = 5.88)\) to the lifetime frame \((M = 5.20, p < .05)\).

The effect of temporal framing of savings on purchase intentions

The temporal framing of savings did significantly influence purchase intentions \((F = 3.16, p < .05)\). Although purchase intentions did increase from the one month \((M = 5.08)\) to the one year \((M = 5.31)\) frame, this difference was not significant \((F < 1)\). Purchase intentions were significantly lower \((p < .02)\) in the lifetime frame \((M = 4.42)\) compared to the one year and one month frames, indicating that in general, participants had higher purchase intentions given the more concrete proximal one month and one year frames compared to the more distal and abstract lifetime temporal frame, consistent with our prediction.

**Study 1 Discussion**

The results from the first study show that in general consumers do discount savings when the framing of the savings is distal even though they are given a larger savings amount in the distal frame as compared to the more proximal frames. Also, in the one year frame, consumers do not appear to substantially discount savings, or have substantially lower attitudes or purchase intentions compared to the one month frame, but consumers do have somewhat lower attitudes and lower purchase intentions given the more abstract and distal lifetime savings frame. Even though the amount of savings evens out over the different time frames and the savings amount shown is very small in the proximal frames, consumers appear to discount the amount of savings given a more distal and abstract message frame and have more positive evaluations of proximally framed messages compared to distally framed messages. These results are consistent with our expectations, CLT and the discounting literature.

Given the findings from study 1, we were interested to extend our results and see if there are individual differences that may cause consumers to react differently to the temporal framing of savings and possibly indicated different types of discounting for different consumers. In study 2, we add temporal orientation, a person’s preference for
future outcomes versus immediate outcomes, to the analysis. Rather than just measuring purchase intentions we had participants choose between two products so that we could measure actual choice. Specifically, participants made a choice between deciding to buy a CFL bulb and a standard incandescent light bulb.

Based on past research on temporal orientation and CLT, we believe that future oriented consumers will not discount savings, will have higher attitudes and will choose CFL bulbs more than incandescent compared to present oriented people given the more distal lifetime frame, because future oriented people are more able to focus on future outcomes compared to present oriented people (Lasane and Jones 1999). In the proximal conditions, we believe that there will not be a difference between future and present oriented consumers because future oriented consumers do not necessarily discount the present (Tangari et al. 2008).

**STUDY 2**

**Method**

**Design**

A 3 (temporal framing of savings: one month vs. one year vs. lifetime) x 2 (temporal orientation: present vs. future) between subjects design was used for our analyses.

**Procedure**

Data was collected during two different time periods. A total of 69 undergraduate research participants at a large Southern university completed both surveys in exchange for modest course credit. The sample was 47% male with a mean age of 21. The first data collection gathered information regarding the independent variables and general information. The second data collection presented the manipulation, measured the dependent variables and included manipulation checks.

The manipulated variable in study 2 was the temporal framing of savings, while temporal orientation was a measured variable. With each survey subjects received a product sheet where they were presented with side-by-side pictures of two products, a CFL bulb and an incandescent light bulb. On the product sheet the price of CFL bulb or the incandescent light bulb was presented above each product. The CFL bulb listed its retail price as $3.75 per bulb and the incandescent bulb’s price was listed as $0.99 per bulb. Pricing was determined through a nonrandom sampling of local area store pricing during the fall of 2007. The labels on the CFL bulb’s package differed across the different conditions.

The manipulation of savings was similar to the first study and included one month, one year, or a lifetime condition, but had slightly different wording. We only presented the savings per light bulb rather than including both the savings per light bulb and the savings if you changed all the light bulbs in your house as we did in the first experiment. Specifically, the temporal framing of savings used a message on the package of a CFL bulb that stated, “On average, this bulb will save you $0.55 ($6.40 / $45.00) in electricity costs in JUST ONE MONTH (in JUST ONE YEAR / over the LIFETIME OF THE BULB)”. Subjects were randomly assigned to one of the three conditions.
To measure a subject’s temporal orientation the Temporal Orientation Scale (Lasane and Jones 1999) was used. This scale includes past, present and future orientations. For the purposes of this study, we were interested in the present and future conditions so subjects only responded to items related to the present and future items. All items were measured on seven-point scales with endpoints of “Not True” to “Very True.” Present orientation is a five-item measure with items such as: “Generally, I am more focused on what is going on now than on what will happen in the future;” “I try to live one day at a time;” and “If I take care of the present, the future will take care of itself.” Future orientation is also a five-item measure with items such as: “I take care of what needs to be done before having fun” and “I get things done by working at a steady pace.”

A principal component factor analysis was conducted to confirm the two factors. The analysis resulted in two factors with eigenvalues greater than two and each item loaded on the appropriate factor. The reliability coefficient alphas were acceptable with both present and future orientation measures exceeding .70 (Nunnally and Bernstein 1994). Subjects were classified as present oriented if their present orientation score was dominant and future oriented if their future orientation score was the dominant score (Lasane and Jones 2000). If the present and future oriented scores were the same, then these subjects were not included in the analysis.

The primary dependent variable of interest is whether subjects chose the CFL bulb or the incandescent light bulb. Subjects were asked to, “Please take some time to carefully look over the product sheet given to you. Imagine that you own a house and need to buy a 60 watt or equivalent light bulb for your house. The two bulbs on the product sheet fit this description. Decide which product on the product sheet you would choose if you were out shopping for light bulbs.” After looking over the product sheet, subjects answered the question, “Which product would you buy today?” Subjects could choose the CFL bulb (coded as 1) or the incandescent light bulb (coded as 0). Other dependent measures included participants’ attitude toward the CFL bulb as used in the first study (α = .90). In addition, we used the same perception of cost savings measure, but we added an item to the measure. We asked if they believed the CFL bulb would save them money by asking, “The energy cost savings for option ‘A’ (the compact florescent light bulb) are substantial,” and, “The energy cost savings for option ‘A’ (the compact florescent light bulb) are worth the price,” measured on a seven-point scale with endpoints of “strongly disagree/strongly agree” (α = .88).

Results
Manipulation checks
To check the temporal framing of savings we asked participants “For the compact florescent light bulb, how soon would you save on electricity costs based on the information on the package?” The endpoints were “In the immediate future” and “In the distant future” on a seven-point scale. Using ANOVA, the means followed the expected pattern with the one month condition closest to the immediate future and the lifetime condition closest to the distant future with the one year condition in the middle (F = 5.09, p < .01).
Analysis of predictions

To analyze our predictions we ran 3 (temporal framing of savings: one month vs. one year vs. lifetime) x 2 (temporal framing: present vs. future) ANOVAs on the dependent variables of attitude toward CFL bulbs, and perceived CFL savings. Given the dichotomous light bulb choice variable, we ran logistic regression to test the predicted interaction.

The moderating effect of temporal orientation on light bulb choice

We looked to see if choice was different given different temporal orientation of subjects in the temporal framing of savings conditions. We predicted that future oriented consumers would be more likely to choose the CFL bulb in the distal condition compared to present oriented consumers. We did not expect a difference in choice between future and present oriented consumers in the more proximal one month and one year conditions. Figure 1 shows the percentage of participants who chose the CFL bulb over the incandescent.

The logistic regression results indicate that the interaction between the temporal framing of savings and temporal orientation was significant ($\chi^2 = 14.70, p < .01$). In the one month ($\chi^2 = 2.90, p = .14$) and in the one year savings frame ($\chi^2 = .01, p > .90$), future and present oriented subjects’ light bulb choices were not significantly different, indicating that a consumer’s temporal orientation does not significantly influence consumers’ choice between a CFL bulb and an incandescent light bulb when the benefits of a CFL bulb are framed proximally.
It is not until the distal lifetime savings frame that we see future and present oriented consumers’ behavior diverge ($\chi^2 = 9.59$, $p < .005$). In the lifetime condition, future oriented subjects are much more likely to buy CFL bulbs (100%) compared to present oriented subjects (33%). In fact, all future oriented subjects in the lifetime frame chose CFL bulbs over incandescent light bulbs. The difference in the lifetime framing condition supports our prediction that future oriented consumers would choose the CFL bulb more than present oriented consumers when the benefits of a CFL are framed distally.

Additional analyses indicate that present oriented subjects chose the CFL bulb more in the one month frame (100%) compared to the one year frame (63%; $\chi^2 = 4.50; p < .05$) and the lifetime framing condition (33%; $\chi^2 = 8.89; p < .01$). We did not see a significant difference in future oriented participants’ CFL choice between the one month and one year conditions, but future oriented consumers chose the CFL bulb more in the distal lifetime frame (100%) compared to the one year frame (56%; $\chi^2 = 6.75; p < .01$).

The moderating effect of temporal orientation on perceptions of CFL savings and attitude

To assess perception of CFL savings and attitude toward the CFL bulb we ran 3 (temporal framing of savings: one month vs. one year vs. lifetime) x 2 (temporal orientation: present vs. future) ANOVAs. We predicted that given the lifetime frame, future oriented consumers would have higher perceptions of savings and higher attitudes compared to present oriented consumers. The interaction was significant for perception of savings ($F = 3.66; p < .05$). The pattern of means for this interaction is depicted in Figure 2, with higher numbers indicating a higher perception of savings. Consistent with our prediction, follow up contrasts indicate that future oriented consumers ($M = 5.91$) had higher perceptions of savings given the lifetime frame ($M = 4.50$, $p < .05$). In the most proximal one month frame, there was no significant difference between perception of savings for future and present oriented consumers. Interestingly, present oriented consumers had higher perceptions of savings ($M = 5.37$) in the one year frame compared to future oriented consumers ($M = 4.13$), but this difference was not significant ($p > .05$). For attitude, the interaction was not significant ($p > .10$), so we did not find support for our prediction that attitudes would be stronger for future oriented consumers compared to present oriented consumers in the lifetime frame.
DISCUSSION

We conducted two experiments that assessed the effects of temporal framing on purchase intentions, product choice, attitude toward the product and perception of savings. In the first study we presented participants with three different temporal frames of savings (one month vs. one year vs. lifetime) and found that in general, participants had lower purchase intentions and somewhat lower attitudes given the most distal and abstract lifetime frame compared to the more proximal one month and one year frames. It also appears that consumers discount the savings provided by the use of a CFL bulb as temporal distance increases.

In the second study we conducted an experiment where subjects were asked to choose between an incandescent light bulb and a CFL bulb. There were three different temporal frames of savings, similar to the first study. In the second study we found that given the lifetime framing, present oriented consumers were less likely to choose the CFL bulb over the incandescent and also view the savings from a CFL bulb as much lower compared to future oriented consumers. Given the findings that present oriented consumers perceive the savings from the CFL bulb as less than what future oriented consumers perceive the savings to be, these results seem to indicate that present oriented consumers discount at a greater rate than future oriented consumers as distance of the outcome increases. We are not aware of any other studies that have looked at this difference between temporal orientation and levels of discounting given different temporal savings frames. Our findings appeared to be consistent with what we would expect from combining CLT (e.g. Liberman and Trope 1998), discounting (e.g. Thaler 1981) and the temporal orientation literature (e.g. Lasane and Jones 1999).
We also found that present and future oriented consumers appear to perceive the savings in the most proximal frame similarly and to have similar product choice behavior. These findings are consistent with other studies (e.g. Tangari et al. 2008) that have found that future oriented people do not discount temporally near events, so as we expected, both future and present oriented consumers react similarly to messages that have the most proximal frame.

Including the savings in concrete, specific terms and the temporal nature of the savings, which in the more proximal conditions would have more concrete construal and in the distal condition would have more abstract construal, impact subsequent decision processes such that the activation of one type of association (e.g., type of construal) interferes with the retrieval and activation of other associations or construal (Hoch 1984). Thus, the construal associations have varying degrees of accessibility and the most readily accessible association impacts future association activation. When outcomes, such as money saved, are represented concretely, it is increasingly difficult to initiate a subsequent relatively abstract representation of that same outcome (Malkoc and Zauberman 2006). This could explain why consumers appear to have lower evaluations given the distal (abstract) frame. Further, Lynch and Zauberman (2007) suggest that when consumers consider product choices based on temporal distance there is more within-subject variation, and thus more intrapersonal dissatisfaction, when the choice is taken from a distal perspective and reevaluated more proximally. This dissatisfaction from switching between perspectives might have caused the benefit conveyed in the message from one temporal frame to neutralize the benefit conveyed in the message of the other temporal frame.

Beyond the theoretical contribution of this research, this research also has managerial implications. Currently, many CFL bulb manufacturers say on their packaging how much a person can save over the lifetime of the bulb. This current technique may not be the best to use for products such as CFL bulbs or other products that could save the consumer money in the future since it may not reach the largest segment of consumers. Our results indicate that only future oriented consumers are much more likely to buy a CFL bulb based on the lifetime savings message compared to present oriented consumers. Given our findings, the best temporal frame to use in a message regarding the potential savings would be the most proximal message. In these studies we used a one month frame that indicated the consumer could save $0.55 on average over a month. Even given this small monetary amount, both future and present oriented consumers were more likely to choose the CFL bulb over the incandescent light bulb in the most proximal frame. Framing a small amount of savings as temporally near rather than a large amount of savings as temporally distant should influence a wider group of consumers to buy CFLs.

This research is important given the push for manufacturers to offer increasingly more efficient products. Consumers are becoming more aware of energy use and are always looking for ways to save money. Finding the most effective way to communicate the savings and efficiency of a product that will get a consumer to choose the more...
efficient product is not only important to marketers, but widespread use of more energy efficient products will be better for society in general as people will consume less energy.

**Limitations and Future Research**

We acknowledge limitations in our study. First, the study employs a student sample, which potentially could restrict the generalizability of the findings. Future research should extend findings to a broader sample. Second, in the second study subjects were given only two products from which to choose, when in an actual shopping environment they would have many products to choose from and evaluate. Further research may want to test the framing effects across several different products within a category or a variety of product categories and also try to create a more realistic decision environment.

Based on the pattern of means shown in Figure 1 and Figure 2, it appears that future oriented consumers do not discount the temporally framed messages in the same way as present oriented consumers. Future research may want to take a closer look at the discounting functions of present versus future oriented consumers to get a better understanding of how these different segments react to costs and benefits.

Other dependent variables, in addition to product choice, could demonstrate the robustness of construal level effects on consumer decision making. For example, the impact of construal levels on variables such as persuasion and product attribute recall has important implications for consumer research, yet very little is known about the potential main effects or the consumers processing involved. Studying other dependent variables would be an important extension of this research.
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“35% (OR 85%) BELIEVE DIET PEPSI TASTES MORE LIKE REAL COLA”: DO NUMBERS MATTER?

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We document and explore a novel instantiation of scope neglect. While highly numerate successfully integrated numeric information in their product evaluations, those who were less numerate demonstrated stronger neglect of numeric information. Study 1 with a Signal-Detection-Theory paradigm demonstrated that scope neglect led a majority of participants, especially the less numerate, to inaccurately believe that “most consumers believed Diet Pepsi tasted more like real cola” when earlier told that “35%” of consumers believed.” Study 2 showed that the less numerate were more susceptible to scope neglect and failed to correctly evaluate unfavorable products whereas the highly numerate were more successful.

In a recent television campaign, Pepsi claimed that their Diet Pepsi tastes more like real cola because in a test comparing two colas, 56% believed Diet Pepsi tasted most like real cola. Do consumers understand and use such numerical information in product claims? Considering only 30% of noticed advertisements are actively processed (Bauer and Greyser 1968), the majority of consumers may be interpreting the claim as “consumers believed Diet Pepsi tasted like real cola.” Even if consumers paid active attention to the claim and comprehended each piece of information on its own, they may fail to successfully integrate the numeric information in their judgment of product claims. This scope neglect can lead consumers to make suboptimal decisions.

Our main interest in this paper is to investigate how and if consumers used numeric information in their evaluation of consumer goods. There are three major goals. First, we will investigate evidence for a novel version of the illusion-of-truth effect (Skurnik et al. 2005) using product claims that contain crucial numeric information. In this study, the illusion-of-truth is observed when participants judged claims as true when the numerical meanings of the claims were inaccurately translated (e.g., “30% of consumers” inaccurately translated to “most consumers”). Secondly, we will also investigate the relationships between the illusion-of-truth effect and numeracy (the ability to process basic probability and numerical concepts: Peters et al. 2006). Lastly, the influence of numeric information in product evaluations among those lower and higher in numeracy will be investigated.

Product claims sometimes contain crucial numeric information, an interesting but understudied aspect to understanding consumer judgments of product claims. It has been shown that numerical information is attended to and processed differently than non-numerical information, and this difference in cognitive process can influence consumers’ judgments and behaviors (Peters et al. 2006). For example, Gurmankin, Baron and Armstrong (2004) found that people with less number proficiency are more likely to trust verbal information than numerical information, whereas people with better number skills are more likely to trust numerical information.
THE ILLUSION-OF-TRUTH EFFECT

Encoding claims as false claims can lead consumers to later misremember them as true. Hawkins and Hoch (1992) examined how participants’ level of involvement during exposure to consumer information influences what they learn and what they subsequently come to believe. They found that low-involvement information processing and repetition leads to an increase in the truth effect. Familiarity was found to mediate this truth effect; the more familiar the information, the more believable it is for participants. Skurnik et al. (2005) showed that perceived familiarity leads to credibility even when product information has been explicitly identified as false. They argued that participants lose contextual information (e.g., claim is true or false) after some time, and they simply remember that they have seen the product information. This relationship between familiarity and credibility has been shown in numerous studies (Hasher et al. 1977, Hawkins and Hoch 1992).

Although the illusion-of-truth effect has been examined in several research studies, claims using numeric information have not yet received much attention. In our everyday life, we often encounter product claims that use numeric information, particularly percentages like the Diet Pepsi example above. Exposure to this Diet Pepsi claim may actually lead consumers to believe after some time that Diet Pepsi tastes more like real cola for two reasons. One is because some consumers may not understand and incorporate the numerical part of the claim very well (e.g., 56% is only approximately half of the total consumers). Secondly, as it has been shown in previous the illusion-of-truth effect studies, consumers may use familiarity of information to judge the truthfulness of claims. For these two possible reasons, consumers may believe that “consumers believed that Diet Pepsi tastes most like real cola.”

NUMERACY

Some research has been done on numeracy, which is an ability to process basic probability and numerical concepts (Peters et al. 2006). Recent research suggests that people differ substantially in this ability (Lipkus, Samsa and Rimer 2001, Wolochin et al. 1999) and many people are “innumerate” (Paulos 1988). Data from the National Literacy Survey indicate that about half of Americans lack the minimal mathematical skills needed to use numbers embedded in printed materials (Kirsch et al. 2002). This may suggest that about half of all Americans lack the skills to understand simple numerical information used in product information and other marketing contexts.

In Peters et al.’s study (2006), participants were presented with a statement with a probability. For example, “Emily” was described as receiving 74% correct or 26% incorrect on her exam. They found that less numerates showed a stronger framing effect than highly numerates. They argued that this is because highly numerates are better at transforming a number in one format (e.g., 74% correct) to another format (e.g., 26% incorrect). In another study in their paper, their results indicated that highly numerates, compared to less numerates, can have a clearer feeling about the goodness or badness of their feelings toward numerical information. They argued that highly numerates were more likely to deliberate about and compare numeric quantities, and hence developed a more precise affective reaction to the numeric information. These results from Peters et
al.’s study suggests that highly numerates may better understand the numerical information expressed in percentages in product claims and later use this information to judge product claims.

**EXPERIMENT 1**

One of the main goals of the first study is to test the illusion-of-truth effect using product claims that contain crucial numeric information. In our study, this illusion-of-truth effect was observed when participants incorrectly judged false claims as true when the numerical meanings of the claims were translated inaccurately (e.g., “30% of consumers” was inaccurately translated to “most consumers”). Secondly, we will also investigate the relationships between the illusion-of-truth effect and numeracy. It is hypothesized that the highly numerate are less susceptible to the illusion-of-truth effect because the highly numerate pay more attention to numeric information than do the less numerates (Gurmankin et al. 2004), and they also better understand numerical information (Peters et al. 2006).

**H1:** Participants are more likely to believe inaccurate numeric claims as true if claims were familiar

**H2:** Highly numerate individuals are better able to make truth judgments than less numerate individuals.

**Method**

**Design**

Study 1 was a mixed design. Claim type (True, False vs. New) and numerical values (Low vs. High) were within subjects and numeracy was between subjects. In the evaluation phase, participants were shown a series of product claims with numeric information in a percentage format. Claims were divided in thirds. For each participant, one third of claims were randomly paired with a percentage ranging from 35% to 45%, and another third of claims were randomly paired with a percentage ranging from 75% to 85% (see TABLE 1). The rest of the claims were never used in the evaluation phase. The claims were worded in a way such that it is always better to have a higher numerical value (e.g., 85% of consumers liked a product).

In the test phase, participants were presented with a series of product claims including twelve new claims and twenty-four claims from the evaluation phase. The numeric information in the claims from the evaluation phase was replaced by the word “most” (See Table 1). Therefore, modified claims will always be accurate for those who received claims with higher numerical values, inaccurate for those who received claims with lower numerical values in the evaluation phase, and new to the rest of the participants.

**Stimuli Development and Pretest**

Forty product claims were created. All of the products in the claims were consumer products and included beverages (e.g., Diet Pepsi, Sam Adams Beer), automobiles (e.g., Ford F-150), banks (Bank of America), and airline companies (United Airlines). A
pretest was conducted with 68 psychology students on the claims. Each of the participants rated their attitude toward 40 products on a 7-point scale from one to seven (where -3 = very unfavorable and 3 = very favorable). Fourteen products that received a favorability score of above five points were either deleted or replaced with less popular products (e.g., Hilton was replaced with Hampton Inn) in order to avoid a ceiling effect. In the end, 36 product claims were retained.

**Procedure**

150 psychology students participated in this study. They received a link to our study programmed with Qualtrics, and they could take the survey at the time and place of their choosing. After the consent form, each participant received forty-four product claims one at a time and were asked to engage in a low-involvement comprehension task (Lichtenstein and Srull 1987, Hawkins and Hoch 1992) by rating how easy or difficult it is to understand each claim on a seven point scale ranging from 1 = very easy to 7 = very difficult. Among the randomized forty-four claims in this evaluation phase, 12 claims were described with unfavorable lower numerical values and another twelve claims were described with favorable higher numerical values. The remaining twenty claims were filler items and appeared randomly among the target claims. The formats of these filler claims were different from the format of the target claims in order to have some variety.

<table>
<thead>
<tr>
<th>Table 1</th>
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<tbody>
<tr>
<td><strong>Example of Target Claims in Evaluation Phase</strong></td>
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</table>
| In a double-blind taste test, consumers tasted two cola drinks with a bite of cracker or sip of water before each tasting. Among these consumers, 35% believed that Diet Pepsi tasted most like real cola.  
85% of consumers preferred the original Nestlé’s Crunch over the new Snickers Cruncher. |
| **Example of Filler claims in Evaluation Phase** |
| A study suggested that drinking eight ounces of cranberry juice cocktail at a time may be better than drinking four ounces for women trying to prevent a bladder infection. |
| **Modified target claims in Test Phase*** |
| Most consumers prefer the original Nestlé’s Crunch over Snickers Cruncher. |

*Gist of claims is always consistent with claims with high numerical value.

for participants (see TABLE 1). The first two claims were always filler claims in order to reduce a primacy effect (Law, Hawkins and Craik 1998). After some distracter tasks which took approximately 15 to 20 minutes, they proceeded to the test phase. In the test phase, each participant received 38 claims without any numeric information. The first
two claims were filler claims. Of the remaining 36 claims, 24 were modifications of the earlier claims presented in the evaluation phase, and 12 claims were completely new to them in the experiment. Among the modified claims, 12 of them were accurately based on the earlier claim described with favorable higher numerical values, and another 12 of them were inaccurately based on the earlier claim that was described with unfavorable lower numerical values. Participants were informed that some of the claims were accurately and some of the claims were inaccurately based on the claims they saw earlier in the evaluation phase of the experiment. They were also informed that some of the claims were never presented to them during the experiment. For each claim presented, they identified whether it was true (i.e., accurately based on the earlier claim), false (i.e., inaccurately based on the earlier claim) or new. They also completed a 11-item numeracy scale used in past decision studies (Peters et al. 2006, Lipkus et al. 2001).

**Results and Discussion**

*Recognition Performance*

Participants’ response options were “new,” “true” and “false,” and these responses were coded based on accuracy. The percentage of correct judgments was calculated for each claim type (true, false and new) for each participant.

Participants’ recognition rate for repeated claims was high; participants correctly identified repeated claims as repeated claims 88% of the time. A paired sample t-test was conducted with percent correct for new and repeated items (i.e., hit rate for new items and correct rejection for repeated items). It showed that participants were better at correctly identifying repeated claims as repeated claims ($M = .8$) than identifying new claims as new claims ($M = .5$, $t(150) = -13.0, p<.001$). This is consistent with previous research (Hawkins and Hoch 1992).

*Truth Judgment*

The basic illusion-of-truth effect was replicated. The results of a repeated-measures ANOVA demonstrated that repeated claims (both true and false, $M = .67$) were judged as true significantly more often than new claims ($M = .25$, $F(1,149) = 268$, $p<.001$). This suggests that participants are more likely to believe the familiar claims than unfamiliar claims. Among the repeated claims, participants successfully judged true claims ($M = .69$) as true more than false claims ($M = .65$) as true ($F(1,149) = 6.4$, $p<.05$). Further, participants were more likely to inaccurately judge false claims ($M = .65$) as true than new claims as true ($M = .25$, $F(1,149) = 238$, $p<.001$). This finding supports previous findings of the illusion-of-truth effect (Skurnik et al. 2005): participants were more likely to believe inaccurate claims as true if they were familiar (hypothesis 1). These results indicated that although participants could correctly judge true claims as true in general, they were likely to judge claims as true if they have seen them before regardless of its actual accuracy.

*Numeracy and Truth Judgment*

The mean numeracy score was 8.4 (median = 9) out of 11 possible (range = 1-11, $\alpha=67$). Because the distribution was highly skewed, a median split was performed (i.e., Peters et al. 2006). Results from repeated-measures ANOVA test indicated that both low
and highly numerates were more likely to judge repeated claims ($M = .65$ and $M = .69$ respectively) as true than new items ($M = .30$ and $M = .21$ respectively) as true ($F(1,149) = 267, p<.001$). For individuals with low and high in numeracy, the proportion of true ratings was higher, on average, for false claims ($M = .65$ and $M = .65$ respectively) than for new items (less numerates: $F(1,65) = 73, p<.001$, highly numerates: $F(1,83) = 179, p<.001$ See Figure 1). This indicates that both less numerates and highly numerates are susceptible to the illusion-of-truth effect (Skurnik et al. 2005).

In order to assess the illusion-of-truth effect further, a measure of $d'$ from signal detection theory was calculated (Law et al. 1998, Singh and Churchill 1983). The $d'$ value is a summary report of each participant’s truth judgment performance. In order to calculate $d'$, the hit rate (HR) and the false-alarm rate (FAR) for each participants were calculated first. The HR is the proportion of times that participants accurately judged true claims as true; the FAR is the proportion of times they inaccurately judged false claims as true. In order to compute $d'$, HR and FAR of 0 percent and 100 percent were converted to 1 percent and 99 percent (Law et al. 1998, Macmillan and Creelman 1991). Then the $d'$ was calculated using a formula $Z_{\text{far}} - Z_{\text{hr}}$, where $Z_{\text{far}}$ is the standardized score for the FAR and $Z_{\text{hr}}$ is the standardized score for the HR. Because $d'$ is a difference between standardized HR rate and FAR, a larger number indicates better truth judgment performance.

Results of an ANOVA demonstrated that $d'$ scores were higher for highly numerates ($d' = .25$) than less numerates ($d' = .03, t(148) = -1.8, p < .05$). This result indicates that highly numerate individuals were better at truth judgments than less numerate individuals (hypothesis 2). Results of a one sample t test indicated that, although $d'$ for highly numerates was significantly different from zero ($t(83) = 3.5, p$

Figure 1
Percentages of Truth Judgment Among New, False and True Claims By Less and Highly Numerates

![Figure 1](image-url)
< .001), d’ for less numerates was not significantly different from zero (t(65) = .4, p = ns). This result indicates that the accuracy of truth judgments made by individuals low in numeracy were not significantly better than chance.

Consistent with previous research, our participants more often judged repeated claims as true (whether they were true or false) than they did new claims; however, highly numerate individuals were significantly more successful at judging accuracy in product claims compared to the less numerate: judgment accuracy of the less numerate was not significantly different than chance. It may be that less numerate participants were susceptible to scope neglect and used claim familiarity to judge truthfulness whereas the high numerates more successfully used numeric information in their judgments.

In our next study, we tested whether highly numerate individuals were more likely than the less numerates to integrate the meanings of numeric information when they evaluate fictitious products in product claims.

**EXPERIMENT 2**

Experiment 1 provided evidence that highly numerates were better at identifying true claims as true when they were asked to judge the truthfulness of the claim based on earlier exposures. However, Experiment 1 does not provide an explanation as to why highly numerates were better at identifying true claims as true. One possibility is that highly numerates are better at integrating numeric information into their judgments when they process information in product claims. In this experiment, participants were shown product claims containing crucial numeric information, and they were asked to judge the favorability of the target claims. We hypothesized that highly numerate individuals would be better able to integrate numeric information and, thus, would be influenced more by numeric information in each product claims.

### Table 2

<table>
<thead>
<tr>
<th>Example of Target Claims</th>
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<tbody>
<tr>
<td>Among physicians surveyed on the West Coast, thirty-nine percent recommended Pentol over Phemanide for fever reduction and temporary relief of minor aches and pains. Forty-five percent of them said they take Pentol themselves, and forty-four percent of patients also preferred Pentol over Phemanide.</td>
</tr>
</tbody>
</table>

**H3:** Highly numerate individuals are more likely to integrate numeric information in evaluating product claims than less numerate individuals.

**Method**

**Design**

Experiment 2 was a mixed design. Numerical values (low vs. high) were repeated within subjects: numeracy was between subjects. Each product claim contained two fictitious products and three pieces of numeric information (See TABLE 2). Numeric information in each claim was always either between 35% and 45% (a low level) or
between 75% and 85% (a high level). Each claim contained low levels for half of the participants and high levels for the rest of the participants. As in Experiment 1, high numeric information is always preferable to low numeric information.

Procedure
92 college students participated in Experiment 2 in a computer lab. Each participant was shown six fictitious products claims on a computer screen one at a time, and they were asked to rate the favorability of each product on a seven-point scale ranging from 1 = very unfavorable to 7 = very favorable. At the end of the experiment, they completed the same numeracy scale used in Experiment 1.

Results and Discussion
The mean numeracy score was 9.4 (median = 9.5) out of 11 possible (range = 1-11, α= 67). To be consistent with Experiment 1, participants with numeracy scores of 9 or lower were coded as less numerates and those with numeracy score of 10 or 11 were coded as highly numerates.

A repeated-measures ANOVA was conducted on the favorability scores with low versus high numeric information claims as a repeated measure. A median split numeracy score was entered as a between-subjects factor. A significant main effect revealed that high numeric information claims ($M = 5.4$) were judged significantly more favorable than low numeric information claims ($M = 3.8$, $F(1,90) = 104.51$, $p<.05$). A significant interaction was also found ($F(1,90) = 4.24$, $p<.05$, See Figure 2). The means indicate that the difference between participants’ judgments of favorability towards products in claims with high numeric information and claims with low numeric information was larger for highly numerates ($Mean \ difference = 1.9$) than for less numerates ($Mean \ difference = 1.2$; hypothesis 3). Further, highly numerates’ evaluation of products with low numeric

Figure 2
Favorability Scores Towards Product Claims with Low and High Numeric Information
By Less and Highly Numerates
information (M = 3.6) was significantly below the midpoint (cf. labeled as “neutral,” t(45) = -2.57, p < .05) and their above the midpoint (t(45) = 12.3, p < .001). For less numerates, on the other hand, only product evaluations with high numeric information (M = 5.3) were significantly different from the midpoint (t(45) = 9.97, p < .001) whereas evaluations of products with low numeric information (M = 4.1) were not significantly different from the midpoint (t(45) = .5).

In a follow up question at the end of the experiment, participants were asked how important the numeric and non-numeric information were to their judgments. Results of an ANOVA revealed a significant interaction with numeracy. An examination of the means suggested that less numerates reported that numeric (M = 4.8) and non-numeric (M = 4.3) parts of the information were equally important (t(45) = 1.7, p = ns ); whereas, highly numerates reported that the numeric part (M = 4.9) of the information was more important than the non-numeric part of the information (M = 3.6, F(2,89) = 3.5, p < .05). In summary, Experiment 2 suggested that highly numerate individuals may pay more attention to numeric information and they more successfully integrated this information into their evaluations compared to individuals lower in numeracy.

GENERAL DISCUSSION

We are exposed to hundreds of pieces of product information containing numeric information every year. However, our study indicates that not all of the numeric information may be used and even useful to all consumers. For example, individuals low in numeracy in our study could not tell the accuracy of favorable claims (e.g., 85% of consumers believed Diet Pepsi tastes more like real cola) better than chance when they were previously presented with unfavorable claims (e.g., 35% of consumer believed Diet Pepsi tastes more like real cola). Further, although numeric information in a product claim indicates low favorability, less numerates’ product evaluations were not significantly different from the neutral point while highly numerates’ evaluations were significantly lower than the neutral point. These results suggest that although numeric information in product claims can be very crucial and alter the gist of claims (e.g., 35% vs. 85% chose Nestlé’s Crunch over the new Snickers Cruncher), less numerate individuals may not attend to and use numeric information in product claims when judging truthfulness of claims and favorability of products. This may lead consumers, especially those lower in numeracy, to misunderstand the claims and develop their attitude towards products based on inaccurate information.

Our participants were fairly highly educated (cf. college students), whereas recent research suggests about half of Americans lack the minimal mathematical skills needed to use numbers embedded in printed materials (Kirsch et al. 2002). This suggests that a fairly large number of people in the U.S. may be susceptible to scope neglect in product claims. Future research is needed to investigate how we can make numeric information more useful for less numerate as well as highly numerate consumers in order to help their evaluations of product claims.

This research further contributes to the understandings of consumers’ numeric judgments by demonstrating novel instantiation of scope neglect. More research is
needed to illuminate how consumers understand numeric and non numeric information in product claims and how they use this information in their evaluations. This understanding will facilitate development of best practices in the use of numerical information in communicating with consumers.
REFERENCES

Bauer, Raymond A. and Stephen A. Greyser (1968), Advertising in America: The Consumer View, Boston: Harvard University, Graduate School of Business Administration.


