WHAT DID YOU DO TO MY BRAND?
THE MODERATING EFFECT OF BRAND NOSTALGIA ON CONSUMER RESPONSES TO CHANGED BRANDS

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Abstract

Marketers often make changes to brands to make the brand seem current or exciting. Some updates are successful while others are spectacular failures. This dissertation establishes a connection between consumer acceptance or rejection of updated brands and the consumer’s reported brand nostalgia. In this dissertation, I refine the current marketing definitions of nostalgia to develop a more specific construct of brand nostalgia, develop a scale to measure the construct of brand nostalgia, examine the differences between schemas for nostalgic brands and non-nostalgic brands, and show that consumers’ affective and attitudinal responses to changes in a brand are moderated by brand nostalgia.

Nostalgia has been defined as “a positively toned evocation of a lived past” (Davis 1979), and “a fondness for possessions and activities associated with days of yore” (Holbrook 1993). Consumers have been observed to engage in nostalgic behaviors, from re-watching favorite old movies (Holbrook, 1993) to reminiscing about favorite cars from their youth (Brown, Kozinets and Sherry 2003) to consuming specific foods as a way to reconnect with the past (Loveland, Smeesters and Mandel, 2010). Consumers have also reported nostalgic feelings for particular brands or items (Holbrook and Schindler 2003).

When individuals recall nostalgic memories, they recall affect and brand information stored in their schema for the target brand (Collins and Loftus 1975). Nostalgia is “not a true recreation of the past but rather a combination of many different memories, all integrated together and in the process, all negative emotions filtered out” (Hirsch 1992). Thus, the individual’s memory trace is biased, leading the individual to
recall the brand as being better than it actually was. Further, when an individual forms a relationship with a brand, the individual incorporates affective and attitudinal information into the schema, leading to a more complex, more robust schema (Fournier 1998; Smit, Bronner and Tolboom 2006). Once the individual experiences the updated brand, he compares the new experience to his biased memory and attempts to assimilate the new stimuli into his or her existing schema. The individual’s ability to assimilate the new experience into their schema built on the biased memory will depend on the degree of change to the brand as well as the individual’s level of nostalgia towards the brand.

When a highly nostalgic individual processes a changed brand, his more complex and affect-based schema will lead to a smaller latitude of acceptance for the change (Hart and Diehl 1993). If the change falls outside the latitude of acceptance, the individual will reject the updated brand (Atkins, Deaux & Bieri 1967). Conversely, less nostalgic individuals are likely to have less complex, less affect-laden, less positively biased memories of the brand, making them more likely to assimilate the change (Meyers-Levy and Sternthal 1993; Martin 1986; Martin, Seta and Crelia 1990).

This dissertation combines literature from marketing, psychology and sociology to identify the ways in which the cognitive structures nostalgic individuals access when exposed to a brand towards which they are nostalgic differ from the cognitive structures non-nostalgic individuals access. This dissertation further provides a framework for both practitioners and academics to better predict consumer responses to changes in brands with nostalgic cache.
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Chapter 1

Introduction

Motivation for Research

In the consumer goods market today, more and more companies are relying on nostalgia to help sell products. Recent examples include the rerelease of films (Titanic, Willy Wonka and the Chocolate Factory), the use of retro boxes in breakfast cereals, and even the design of automobiles. In some cases, such as the Chrysler PT Cruiser, a new product is designed to appear as though it comes from an earlier time and invoke feelings of nostalgia (Brown, Kozinets and Sherry 2003) while in other cases, such as the rerelease of the Volkswagen Beetle, an established brand is updated and reintroduced to the market.

Currently, there are two main approaches taken when using nostalgia to sell products. The first, called “retromarketing” (Brown et al. 2003), uses new products designed to feel like old-fashioned products. The Chrysler PT Cruiser, as mentioned above, is an example of retromarketing, as are newly built 1950’s diners, new t-shirts with brand logos that were used decades ago, and even microwave ovens being made available in colors such as avocado and goldenrod that were popular in the 1970’s. What is significant about these items is that they are all new items designed to invoke nostalgic feelings while delivering performance comparable to other modern brands. That is to say, while these items were developed and designed to feel as though they come from decades past, they come with all the bells and whistles that are expected of a product in today’s marketplace. These items often come with another modern feature, a hefty price
A microwave oven for home use designed to look as though it came from a 1950’s kitchen can be purchased from an online retailer specializing in retro appliances for a dollar amount several times greater than a microwave with a more modern appearance and comparable features.

The second approach to using nostalgia as a marketing tool is to capitalize on the nostalgic feelings some individuals may feel towards an existing brand. When using an established brand, marketers can choose either to reintroduce a brand that is currently unavailable on the market, or they can position a currently available brand in such a way that customers may be reminded of their brand nostalgia. An example of a reintroduced brand is Quisp cereal, a cereal geared towards children that was introduced in 1965 and discontinued in the late 1970’s (MrBreakfast.com, accessed on April 20, 2012). Quisp cereal has been reintroduced several times since the 1970’s, most recently available for sale in Super Target stores (enotes.com, accessed on April 29, 2012). In this case, the brand has had several large gaps of unavailability and, as part of its 2011 reintroduction, was positioned as part of a larger nostalgic push, complete with accessory items such as t-shirts and wallpaper graphics for computer backgrounds.

Alternatively, marketers have also been using brands which have continued to be available and, after decades, repositioned the brand to capitalize on customers’ brand nostalgia. This strategy is very similar to rereleasing a brand that has been discontinued but varies slightly as the product has been available without interruption. Examples of this include using packaging from an earlier decade such as using logos or graphics from older campaigns. A recent example of this marketing tool can be found in the cereal aisle, where brands like Honey Nut Cheerios use artwork from the 1980’s in their
packaging. Pepsi has recently engaged in similar positioning by revisiting old recipes. Pepsi Throwback and Mountain Dew Throwback are both produced using cane sugar, as opposed to high fructose corn syrup, and marketed to emphasize their nostalgic taste. In this case, the Pepsi brand has remained continually available but the recipe was changed and the brand updated along the way.

The common thread among these three approaches to nostalgia as a marketing tool is that the brand itself has frequently been altered from its original state. The retro microwave is now more powerful and less likely to leak radiation, the Quisp cereal is produced using high fructose corn syrup instead of cane sugar, and the Honey Nut Cheerios box, while appearing retro, has the nutritional information and symbols required by the Food and Drug Administration today. This begs the question, how do consumers who have nostalgic feelings towards the brand respond to these changes?

Among updated and reintroduced brands, there is practical evidence that shows that some of these marketing initiatives are quite successful, while others can be considered marketing failures. One of the more notable successful updates to a classic brand was the updating and release of the New Volkswagen Beetle. The New Beetle was reintroduced in the United States in 1998, nearly a quarter of a century after the last of the classic Beetles was produced in the US. It was considered a success, with 365,000 vehicles sold in North America between the reintroduction in 1998 and 2002 (roadandtrack.com, accessed on April 2, 2012). The original Beetle, designed and produced in Germany, first became available on the US market in 1949 (Edmunds.com, accessed on April 2, 2012) and reached peak popularity and iconic status in the 1960’s (Edmunds.com, accessed on April 2, 2012). Known for its low price point, reliability and
pervasiveness, many baby boomers fondly recall the Volkswagen Beetle as the car of their youth (Brown et al. 2003). While Beetle fans reminisce fondly about the original, which ceased production in the United States in 1976 and worldwide in 2003, the features the original offered would not be so well received today. Although fuel efficient, the 1967 Beetle took more than 20 seconds to reach 60 miles per hour (Edmunds.com, nd) and lacked such modern features as efficient climate control, compliance with emissions regulations, and legroom. In 1998, when Volkswagen announced the release of a redesigned and modernized Beetle, the response from fans was overwhelmingly positive. Complete with updated features, modern conveniences and a modern price tag, the New Beetle was very well received and, like its predecessor, achieved cult status among enthusiasts (Brown et al. 2003).

Other brand updates have not been so successful. An adult who grew up in the United States will be able to find many examples of these brands in the marketplace today, such as G.I. Joe, a military based toy line developed by Hasbro in the 1960’s and extremely popular throughout the 1980’s (Fletcher, 2009). This brand has been revitalized and reintroduced in the form of two movies, G.I. Joe: Rise of Cobra (2009) and G.I. Joe: Retaliation (2012). In addition to the film release, Hasbro has released the usual assortment of toys, clothing, video games and other items that often accompany an action film. However, if Hasbro was depending on nostalgia to drive the fathers and grandfathers who played with G.I. Joe during its peak popularity to see the movie with their kids, the release may have been considered a failure. RottenTomatoes.com, a website that allows the public to rate and review movies, found that only 34% of viewers rated the movie positively while the remaining two-thirds considered it to be “rotten”
Specific feedback included comments like “There are bound to be some 10-year-olds who will shout a hearty ‘Yo Joe!’ (the G.I. Joe battle cry). The rest of us will more likely be crying, ‘Say it ain't so, Joe!’” (Breimeier, 2009) and “Fans will be disappointed unless they're so desperate that they'll like anything that says it's a G.I. JOE movie,” (Kennedy, 2009).

It is clear that many companies are relying heavily on nostalgia to help sell their products, but consumer’s responses can vary from extremely positive to extremely negative. This leads to the following research questions:

- Why do some individuals accept changes to a brand while others respond negatively?
- Can an individual’s brand nostalgia explain the differences in responses?
- Do individuals who are nostalgic towards a brand respond differently to changes in the brand when compared to their non-nostalgic counterparts?

**History of Nostalgia**

Nostalgia as a construct has been recognized as part of the human condition throughout recorded history, though the name, causes and definitions have changed over the years. McCann (1941) cites references to nostalgia in sources such as Homer’s Ulysses, where the protagonist wept and rolled about on the floor at the thought of home. McCann cites further evidence of the recognition of nostalgia in antiquity in bible psalms such as Psalm 137:1, which states, “Beside the rivers of Babylon, we sat and wept as we thought of Jerusalem.” While the knowledge and acceptance of this human condition
existed for centuries, there was little academic attention paid to the condition until the end of the 17th century.

The first known academic work examining nostalgia is found in Johannes Hofer’s 1688 medical dissertation on nostalgia, a term he used interchangeably with homesickness. In his dissertation, Hofer coined the term “nostalgias” which is taken from the Greek root “nosos,” meaning return to the native land, and “algos,” indicating suffering and grief. The use of the term was originally intended to represent psychopathological homesickness, which manifested psychologically with symptoms as extreme as anorexia, depression, and “stupidity of the mind,” and physically with symptoms such as insomnia, weakness, and cardiac palpitations. Hofer believed that nostalgia, found primarily in Swiss males, was caused by a continuous vibration of animal spirits in the middle brain longing to return to their home, and that the only known cure was to return to the homeland.

Following the publication of Hofer’s dissertation, an increase in academic works on nostalgia was seen, as well as an increase in the diagnosis of the disorder. In his 1941 article “Nostalgia: A Review of the Literature,” McCann lists nearly 40 symptoms historically attributed to nostalgia, including night sweats, insomnia, gastroenteritis, foul breath, cessation of the menstrual flow and convulsions. Further, criminal behavior was frequently attributed to nostalgia. Jaspers, as cited by McCann, describes an incident from 1790 in which a 10-year-old child was accused of murdering another child in a fit of rage precipitated by nostalgia. In 1810, a second child was accused of setting fires as a direct result of her nostalgia or homesickness.
**Nostalgia in Psychology**

The treatment of nostalgia as a medical disease persisted into the late 19th century, at which time the definition of nostalgia shifted from a medical condition to a psychosomatic disorder (Batcho 1998). Prior this time, nostalgia was considered to be an affective condition similar in nature to melancholia or depression (McCann 1941). It is at this time that the terms “nostalgia” and “homesickness” were no longer considered to be interchangeable (Wildschut, Sedikides, Arndt and Routledge, 2006). Instead, nostalgia came to be viewed as more of a “positively toned evocation of a lived past” (Davis 1979) while homesickness focused more on the transition and psychological difficulties associated with major life transitions such as going away to school for the first time (Van Tilburg, Vingerhoets and van Heck, 1996).

The current psychological work in nostalgia is led by Sedikides and Wildschut (2004), who view nostalgia as an emotion of varying valances with an increasing tendency to describe the valance as positive, as opposed to the bittersweet connotations previously associated with the emotion (Wildschut et al., 2006). Interestingly, Wildschut et al. (2006) found that nostalgia as an emotion can be triggered by a negative or bittersweet mood and can be used to increase social connectedness and even increase one’s perceived capacity to be emotionally supportive of others (Wildschut, Sedikides, Routledge, Arndt and Cordaro, 2010).
Nostalgia in Marketing

In the marketing literature, nostalgia has been treated quite differently than in the psychology literature. Within the psychology literature, nostalgia has been treated primarily as a transient emotional state, while in marketing, nostalgia is perceived as more of a psychographic variable. In marketing, nostalgia as an individual characteristic was first addressed by Holbrook and Schindler (1991), who defined nostalgia as “a longing for or favorable affect towards things from the past.” Their initial research into nostalgia examined a demonstrable preference for music that was popular at the time the individual was a young adult (1989). More specifically, Holbrook and Schindler (1989) find evidence of an inverted-U shaped relationship between consumer preferences for music relative to their age when the music was released, showing a peak liking for music that was released when the individual was 23.5 years of age and a dislike for music that was released before the individual was born or once the individual had passed the “peak” age of music preferences.

While conducting this research, Holbrook and Schindler began to explore the theory that some individuals may be more nostalgia prone than others, a theme which has been found in much of the subsequent marketing research on nostalgia. Holbrook elaborated on this idea in his 1993 article, in which he developed an 8-item scale to measure nostalgia proneness, an individual’s psychographic tendency to display “a longing for or favorable affect towards things from the past.” In this work, he found that factors such as age (older respondents tend to be more nostalgic than younger), gender (females tend to be more nostalgic than males), and nostalgia proneness work together to explain individual differences in nostalgic consumption. Further, Holbrook found that
nostalgia proneness increases liking for a particular type of consumer experience over another, for example, preferring romantic movies over action/adventure movies.

Holak and Havlena (1998) examined the emotions behind nostalgia and found evidence that the use of nostalgia as a marketing tool may be difficult to manage. While the emotions associated with the nostalgia may be positively valanced, the act of recalling these emotions can incite negatively valanced emotions as well, particularly if the individual is unable to regain the true experience of the item triggering the nostalgia (Holak and Havlena 1998). Holak and Havlena (1998) found that the negative effects of the inability to regain the true experience can be mitigated when the object is a consumable, such as a food item or entertainment product. In this case, the experience can actually be very close to the original and the experience is more likely to be perceived as a reflection of the past, rather than a true recreation of it (Holak and Havlena 1998).

**Bonded Nostalgia**

In 2003, Schindler and Holbrook amended their definition of nostalgia to, “a preference (general liking, positive attitude or favourable effect) towards experiences associated with 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),” and used this updated definition to extend their research on nostalgia. At this time, Schindler and Holbrook began looking at nostalgia directed towards a specific object, a phenomenon they called “bonded nostalgia,” which they defined as “a consumer’s history of personal interaction with a
product during a critical period of preference formation that occurs roughly in the vicinity of age 20 [that] can create a lifelong preference for that object,” (2003, page 109).

Using a subjective personal introspection method, Holbrook and Schindler (2003) collected essays from individuals describing items towards which they are nostalgic and found evidence that individuals could develop lifelong preferences for specific objects. This suggests that individuals will have nostalgic feelings towards specific items, regardless of their overarching tendency towards nostalgia proneness. Moreover, Holbrook and Schindler found evidence that individuals could be nostalgic for specific brands. Several individuals indicated nostalgia for brands such as Tropicana orange juice or Valentino perfume, and one subject even projected nostalgia for Milk Bone dog biscuits onto her pet dog. Schindler and Holbrook (2003) hypothesized that the nostalgic bonding was formed because of a subject’s personal interaction with that particular product or brand at a formative time. These findings have been used to explain consumer tendencies to select specific items for consumption in order to reconnect with a social network (Loveland, Smeesters and Mandel, 2010), to remain loyal to a sports team despite poor performance (Bristow and Sebastian 2001), and even to prefer positively toned song lyrics (Batcho 2007).

Holbrook and Schindler’s (2003) paper on bonded nostalgia introduced the field to the possibility that individuals could be nostalgic towards very specific items or brands, but the work was intended by the authors as an exploratory discussion to better clarify the role of nostalgia in the consumer experience. Their work is missing several key components to make it useful to marketers.
First, Holbrook and Schindler’s definition of nostalgic bonding focused narrowly on nostalgia for items experienced around the age of 20, downplaying the idea that nostalgia towards an item can be established in childhood or later adult life. In their 2003 definition of nostalgia, Holbrook and Schindler allow for nostalgia for items that the individual experienced over a broader time frame, even including items that existed before the individual was born. If individuals can experience nostalgia for these items, it makes sense that individuals can also create nostalgic bonds with these items. Due to the numerous conditions under which nostalgia towards an object can be formed, individuals may have varying levels of nostalgia towards many brands, even within the same product category, and the nostalgia towards these brands may have formed at different times during the individual’s lifetime. While Holbrook and Schindler have identified key ages in which nostalgia towards specific items is more likely to be formed, for example music, with peak nostalgia occurring for songs the individual first heard at 23.5 years of age (1989), many of the items they tested, such as movies, movie stars and music, are categories which young children may not be aware. Moreover, as the stimuli used in these studies were designed for the adult consumer, to say that children do not begin forming nostalgic feelings is a bit premature. Holbrook and Schindler did find evidence that nostalgia can be established as early as elementary school (2003) but no studies examining the long term effects of this nostalgia have yet been conducted.

A further limitation of their definition is the idea that for an individual to be nostalgic towards an object, the object must no longer be available. For example, the authors describe an individual’s preference for eating ice cream over the course of a lifetime as a non-nostalgic experience, but fond memories of eating junket, a precursor to
today’s boxed puddings, as a nostalgic experience. This assumes that the nostalgic item is in some way lost and irretrievable, ignoring the possibility that the item is not irretrievable but that the individual has moved away from the item, either through time or place. For example, one may be nostalgic for a breakfast cereal which still readily available but that one no longer consumes because it is “unhealthy” or “for kids.” An individual may also become nostalgic for an item still commonly consumed in their native land but unavailable in their adopted land. It is not uncommon to hear a British citizen living in the United States wax poetic about Cadbury’s Dairy Milk Chocolate as a way to reconnect with their homeland or a Texan living in Ohio feel an unfulfillable longing for Bluebell Ice Cream, just like they had when they were little, sitting on the porch with their family and loved ones. This shifts the definition of nostalgia from “a longing for the past that you can no longer have” towards “attaching positive affect to an object or brand because of its associations with positive memories from your lived past.”

Another facet of bonded nostalgia discussed by Holbrook and Schindler is the ability of individuals to form nostalgic bonds with items at the product category, brand or item levels. The evidence of these bonds is strong and not in dispute, yet this approach is somewhat broad. While it is interesting to examine an individual’s bonded nostalgia with a specific item, such as a purse purchased by the subject, a marketer would have difficulty capitalizing on nostalgia that is, by definition, bonded with that specific item. This limitation extends to the product category level, as well. While individuals may be nostalgic for a product category as a whole, it is ineffective for marketers to focus on a whole product category, suggesting that marketers will benefit from a narrower, more focused understanding of nostalgia as it exists at the brand level.
With these limitations in mind, I propose updating the nostalgic bonding construct and expanding the current definition of nostalgic bonding. The new definition will include the effects of nostalgic feelings from any prior age in the individual’s lived experience, assuming a sufficient amount of time has elapsed since the initial consumption. Additionally, while Holbrook and Schindler proposed that a nostalgic object must no longer be available for an individual to be nostalgic towards it, I propose that individuals can be nostalgic for brands that are still readily available. Further, I propose that nostalgia can exist at the brand level, not only at the product category level or at the specific item level.

**Outline of Dissertation**

This dissertation will examine nostalgic bonds between consumers and brands. Building on the existing literature in marketing, psychology and sociology, I refine the existing definition for nostalgic bonding and develop a framework for understanding the underlying causes and cognitive processes that explain why consumers may accept some changes to their brand while rejecting others. I then develop and validate a scale to measure an individual’s brand nostalgia. The development of a brand nostalgia scale will provide a useful tool for academics to allow for deeper exploration of nostalgia, while managerially the scale can be used in conjunction with the findings from this research to make better and more profitable decisions regarding modifications to brands that hold nostalgic cache for their consumers. I further explore how consumers’ schemas for nostalgic brands differ from their schemas for brands towards which they are not nostalgic to develop a deeper understanding of how nostalgic bonds with brands are
formed. Finally, I examine the effects of brand nostalgia on consumer responses to changes in brands towards which they are nostalgic.

Chapter 2 will introduce the key constructs and relevant processes to explain how a nostalgic individual’s processing of changes to a brand differs from the processing a non-nostalgic individual will experience, and predict differences in attitudinal and affective responses to changes in the brand among nostalgic and non-nostalgic individuals. Chapter 3 outlines the development and validation of a scale to measure brand nostalgia. Chapter 4 takes a qualitative approach to help understand the differences in schematic structure and memory content for brands towards which they are nostalgic, compared to those towards which they are not nostalgic. Chapter 5 discusses the findings from two experiments to test the predictions developed in Chapter 2. Finally, Chapter 6 discusses the overall findings of this dissertation and outlines opportunities for future research.
Chapter 2

Theoretical Foundation

Brand Nostalgia

It has been established that nostalgic bonds can encourage an individual to develop a relationship with a brand (Fournier 1998; Smit, Bronner and Tolboom 2006). Fournier discusses a particular form of brand relationship driven by nostalgia and equates it with a childhood friendship, identifying this relationship type as affect laden relationships that recall earlier times and can remind the individual of the comfort and security of the past (1998). Individuals who have nostalgic feelings towards a brand are also likely to incorporate the brand into their self-concept, so that the brand is a reflection of the individual (Ball and Tasaki1992; Belk 1988; Kleine, Kleine, and Allen 1995), allowing for a deeper connection with the brand than would otherwise be found. Thus, individuals’ nostalgic bonds with brands are likely to be a form of brand relationship based on the experiences they had with the brand during their past and the positive emotional connections they have with the brand as a result.

Brand nostalgia is therefore defined as “an individual’s positive affect towards a brand due to the brand’s associations with the individual’s non-recent lived past.” This definition is an improvement over previous definitions. It eliminates the age constraints set by Holbrook and Schindler (2003) and acknowledges that the brand need not be inaccessible for an individual to be nostalgic towards it. Instead, this new definition asserts that brand nostalgia exists as a warm, positively toned affective association with the brand, rather than a sense of loss for what you can no longer have. Brand nostalgia is
also differentiated from nostalgia proneness, which is a psychographic variable which suggests that some people are more generally inclined to nostalgia than others. Brand nostalgia suggests that individuals will have positive affect and attitudes towards specific brands, regardless of their overall tendency towards nostalgia.

**Brand Nostalgia and Brand Schemas**

Individuals who are nostalgic towards a brand are likely to exhibit differences in their schema for the brand when compared to non-nostalgic individuals. A schema is the knowledge an individual holds for an object (Bettman 1979), and is frequently represented as a series of links and nodes in which the individual stores their representations about an item (Collins and Loftus 1975). The more knowledge an individual has about an object, the more robust his/her schema will be. While there is no fixed definition for the term (Brewer and Treyens 1981; Taylor and Crocker 1981), schemas are generally understood to refer to “the general knowledge and individual possesses about a particular domain,” (Alba and Hasher 1983) or “an internal structure, developed through experience with the world, which organizes incoming information relative to personal experience,” (Mandler and Parker 1976).

The nostalgic association with the brand will lead individuals to have a strong affective association with the brand that other, non-nostalgic individuals are not likely to have. Affective associations with the brand have been shown to be incorporated into an individual’s schema for the brand (Fiske 1982). Thus, individuals who are nostalgic towards a brand are likely to have more robust schemas than individuals whose are not nostalgic towards the brand.
Nostalgic Memory Bias

Nostalgic memories have been conceptualized as “not a true recreation of the past but rather a combination of many different memories, all integrated together and in the process, all negative emotions filtered out,” (Hirsch 1992, emphasis added). It has long been established that an individual’s memory for an event is not a completely accurate representation of how the event actually occurred. Rather, the memory is often a biased recollection of an individual’s past. Schacter (1999) defines memory bias as “retrospective distortions and unconscious influences that are related to current knowledge and beliefs.” Memory bias can lead to inaccurate recall of a particular event or can positively bias the affective and attitudinal components of an overall schema for an item. This suggests that individuals who are nostalgic towards a brand will be more inclined to recall the positive aspects of the brand because their memory is positively biased. A nostalgic individual is likely to discount negative memories associated with the brand, if they recall them at all, and thus remember the brand as being better than it actually was.

As such, it can be expected that individuals who have a nostalgic memory bias towards a brand will not only remember that brand as being better than it truly was, but will also have minimized any negative association with that brand, so that the memory has a positively valanced schematic representation in that individual’s mind. These findings contrast with the expected memory trace of an individual who is not highly nostalgic towards a brand, who will have a less positively biased schema for the brand. Thus, individuals who are nostalgic towards the brand will exhibit more positive affect
and attitudes toward the original, unchanged brand than individuals who are not nostalgic toward the brand.

This difference in schema is likely to alter the way in which brand nostalgic individuals respond to changes in the brand when compared to their non-brand nostalgic contemporaries. Due to the schematic differences which can lead individuals to be more sensitive to changes in the brand, violation of the brand expectations developed over the course of the relationship can have extremely detrimental effects on the consumer’s response to the brand. Further, the act of transgression will impact brand nostalgic individuals more significantly than non-brand nostalgic individuals as the transgression will be more salient to the brand nostalgic individuals (Fournier 1998).

**Categorization of Changed Brands**

When exposed to a stimulus, individuals will attempt to categorize the input in a way that makes sense to them (Rosch, Mervis, Gray, Johnson and Boyes-Braem 1976). This “simplified” processing allows for comparisons to be made between un-identical items, as well as allowing individuals to conserve cognitive effort and process the environment more efficiently (Rosch et al. 1976). At the very basic level, when an individual is exposed to a stimulus that is unfamiliar to him, he/she will compare this stimulus to items he/she knows until he/she can make a judgment about the new item. For example, if the individual encounters a hairless cat, he/she will be able to categorize the animal as a cat because of the size, shape and meow, despite the lack of fur he/she normally associates with cats.
Categorization allows individuals to identify members of a category based on the diagnosticity or validity of certain features (Rosch et al. 1976). The more features of the category the item contains or the more representative the item is, the more readily the item is found to be part of the category (McCloskey and Glucksberg 1978). According to the attribute model of categorization, when an individual is exposed to a stimulus, he/she compares the categorical attributes of the subordinate level with the basic and/or superordinate levels (Smith, Shoben and Rips, 1974). If the attributes possessed by the subordinate item are both necessary and sufficient for membership in the higher levels, the item will be considered a member of the hierarchical category (Smith et al. 1974).

When an individual is exposed to a new object, he/she compares it to his/her existing schema for the object and arrives at a judgment based on the relative fit or congruence of the object and the schema (Fiske and Pavelchak 1986). Fiske and Pavelchak (1986) found evidence that when exposed to a stimuli, the individual will initially attempt to categorize the stimuli into an existing category (Fiske et al. 1986) which, if successful, results in category-based affective processing (Sujan 1985). If the item is sufficiently different from the individual’s existing category or schema such that category based affective processing in unsuccessful, the individual will then proceed to analyze the new stimuli on an attribute by attribute by attribute level (Fiske et al 1986).

The increased level of complexity in the individual’s schema can alter the way in which the new object is processed. If an individual has a strong, robust schema, the schema will contain more nodes, each node containing more information (Collins and Loftus 1975). When faced with the task of making judgments about a new object, an individual with a robust schema, by its very definition, has a more complex schema. This
more complex schema will allow brand nostalgic individuals to process the information more completely, taking into account the affective components of the brand which will lead the subject to perceive a greater change to the brand.

**H1:** Individuals who are nostalgic towards the brand will perceive more changes to the brand than will individuals who are not nostalgic towards the brand.

**Responses to Changed Brands**

Once an individual has processed the changed brand, he/she must determine whether the new version of the brand fits with his/her existing schema. Assimilation/contrast theory, as described by Sherif, Tauub and Hovland (1958) hypothesizes that individuals have an anchored representation of an object, in the form of an exemplar or prototype, within their object schema. When presented with a new object, individuals will exert some degree of cognitive effort to fit the new object to the existing schema. If the new object is sufficiently close to the individual’s schema for the item, the change is believed to have fallen within the individual’s latitude of acceptance.

An individual’s latitude of acceptance was originally defined as a “range of stimulus values judged acceptable” (Sherif 1963) or a “range of criterion consisting of statements indicated as acceptable and the scalar distance covered by these statements” (Atkins, Deaux and Beiri 1967). Atkins, Deaux and Beiri (1967) propose that individuals have an internal reference scale of acceptable and unacceptable values for a target item and will render judgment about the item based on where the change falls along the spectrum. If the target item falls within an individual’s latitude of acceptance, the
individual will then accept the change and assimilate the new item into their existing schema. If the target falls outside the latitude of acceptance, a contrast effect occurs and the change is rejected (Atkins, Deaux and Bier 1967).

Herr and colleagues (1983) hypothesized that when an individual is exposed to a new stimulus, his/her category schema is activated, and the individual engages in a comparison of the two using a category exemplar. When the items have a high level of feature overlap, the new stimulus or brand will be assimilated, assuming cognitive effort is low (Meyers-Levy and Sternthal 1993; Martin 1986; Martin, Seta and Crelia 1990). Conversely, if there is less overlap between the target and the schema, the target will be rejected due to high contrast (Herr, Sherman and Fazio 1983).

At the individual level, several factors can influence the size of an individual’s latitude of acceptance. First, the amount of effort an individual puts into the categorization process can vary based on the level of importance an individual places on the item being categorized (Sujan, 1985; Bridges 1993). Individuals who put more effort into attempting to categorizing the item relative to the schema are more likely to contrast the item (Bridges 1993, Stapel, Koomen and Vethuijsen 1998).

However, whether the individual ultimately accepts or rejects the changes to an object depends on how much the object has changed. Small changes to an object are likely to exhibit minimal schema-incongruent information regardless of the individual’s involvement or effort in processing the new version. Mandler (1982) found evidence that schema congruity will lead to a favorable response because the item fits well into the existing schema, a condition which humans prefer to the uncertainty associated with a poor fit. This suggests that when an individual is exposed to a small change that easily
fits into an individual’s schema for a brand, he/she will respond positively to the change as little effort is needed to process the change.

Mandler (1982) further found evidence that schema incongruity increases both arousal and the need for cognitive effort, leading to a less predictable affective response. Meyers-Levy and Tybout (1989) supported these assertions by demonstrating that items that are moderately incongruent with the established schema will benefit from the incongruence more than those which are mildly or significantly incongruent. When a consumer experiences moderate incongruity, the consumer engages in greater levels of cognitive effort in order to reduce the incongruity and reach a decision (Ozanne, Brucks and Grewal, 1992). This suggests that when exposed to a moderate degree of change to a brand, an individual will expend cognitive effort before making a judgment. While processing the changed brand, if the individual is able to reconcile the change, the change will be received positively. However, inability to reconcile a change will lead to a negative judgment (Mandler 1982).

Thus, as the magnitude of the change to the brand increases, individuals who are nostalgic towards the brand, by virtue of their more robust schematic representation and positively biased memory, will compare the changes to the brand to the biased memory, and the resulting comparison will lead to rejection of the changes and a negative judgment of the updated brand. This change in judgment will be not seen in individuals who are not nostalgic towards the brand.
**H2:** Brand nostalgia will moderate individuals’ responses to changes to a brand such that:

**a:** When the change to the brand is small, both nostalgic and non-nostalgic individuals will report affective, attitudinal and behavioral responses consistent with their affective, attitudinal and behavioral responses towards the original brand.

**b:** As the degree of change to the brand increases, individuals will begin to reject the changes to the brand, resulting in negative affective response, attitude toward the brand and behavioral intentions towards the brand.

**c:** Nostalgic individuals will reject lower levels of change than will non-nostalgic individuals.
Chapter 3
Scale Development

One of the major limitations of nostalgia research to date is a lack of tools to empirically measure the construct. The Nostalgia Proneness scale (Holbrook 1993) is designed to measure the psychographic variable of an individual’s overall tendency towards nostalgia but does not measure an individual’s nostalgia as it relates to specific items. The first contribution of this dissertation is the development and validation of a scale to effectively measure brand nostalgia. In developing this scale, I followed the recommendations established by Nunnally (1978), Churchill (1979) and Anderson and Gerbing (1988) in order to achieve a parsimonious and representative scale.

Generation of Items

The development of the scale began with the creation of an initial list of 10 items generated from a literature review of the nostalgia literature. A focus group of eight experts (one Marketing PhD student, six Psychology PhD students and one psychologist) was then convened and participants were shown the definition for the construct (an individual’s positive affect towards a brand due to the brand’s associations with the individual’s non-recent lived past). After reviewing the definition of the construct, the participants were asked to generate any scale-style questions they would use to determine if someone was nostalgic towards a brand. The resulting items were then reduced and refined though discussion with a ninth expert to select items most closely related to the definition of the construct. This resulted in a total of 29 scale items to be tested, as shown in Exhibit 1.
<table>
<thead>
<tr>
<th>Exhibit 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items Generated from Literature Review and Expert Focus Group</td>
</tr>
<tr>
<td>1. I have fond memories of ____________ from my childhood.</td>
</tr>
<tr>
<td>2. When I think back to my childhood, I often fondly recall ____________.</td>
</tr>
<tr>
<td>3. Of all the brands I remember from my childhood, ____________ was one of my favorites.</td>
</tr>
<tr>
<td>4. I would be very excited if I found/used ____________ again.</td>
</tr>
<tr>
<td>5. ____________ played a larger role in my childhood than other brands.</td>
</tr>
<tr>
<td>6. ____________ is one of my favorite brands from my childhood.</td>
</tr>
<tr>
<td>7. I still feel positive about ____________ today because it reminds me of my childhood.</td>
</tr>
<tr>
<td>8. ____________ brand from my childhood still means a lot to me.</td>
</tr>
<tr>
<td>9. When I think of ____________ it makes me fondly recall my younger years.</td>
</tr>
<tr>
<td>10. I still use ____________ because it reminds me of my childhood.</td>
</tr>
<tr>
<td>11. I would be upset if ______ brand from my childhood was discontinued.</td>
</tr>
<tr>
<td>12. ____________ brand was better than comparable brands today.</td>
</tr>
<tr>
<td>13. If I found ____________ today, I would purchase it.</td>
</tr>
<tr>
<td>14. ____________ helped shape my childhood.</td>
</tr>
<tr>
<td>15. If ____________ was available I would be happy/excited.</td>
</tr>
<tr>
<td>16. If presented with the opportunity to use ____________ again, I would do so.</td>
</tr>
<tr>
<td>17. I have positive emotions towards ____________ because I used it when I was younger.</td>
</tr>
<tr>
<td>18. ____________ features in happy memories of when I was younger.</td>
</tr>
<tr>
<td>19. I frequently used ____________ when I was younger.</td>
</tr>
<tr>
<td>20. When I think of ____________ I have positive memories.</td>
</tr>
<tr>
<td>21. ____________ was a big part of my life when I was younger.</td>
</tr>
<tr>
<td>22. I like ____________ because it reminds me of my childhood.</td>
</tr>
<tr>
<td>23. I would get excited if I heard ___ was being reintroduced because I liked it when I was younger.</td>
</tr>
<tr>
<td>24. I actively look for ____________ when shopping.</td>
</tr>
<tr>
<td>25. I want/would want my children to use ____________ because I did when I was younger.</td>
</tr>
<tr>
<td>26. (Product category) used to better than they are today.</td>
</tr>
<tr>
<td>27. I prefer to use ____________ from my childhood, rather than similar brands available today.</td>
</tr>
<tr>
<td>28. Even though I haven’t used ________ in years, I still recall it fondly.</td>
</tr>
<tr>
<td>29. As a child, I always wanted ____________, and some part of me still does.</td>
</tr>
</tbody>
</table>
Scale Structure

Scale Development Study 1

Purification with Student Sample

Following the development of the 29 initial scale items, a sample of 124 undergraduate students (57.3% male, mean age =21.5 years, range = 19-47) was used to test the scale structure. Each subject was asked to spontaneously generate a brand towards which he/she is nostalgic and was instructed to use that brand as the stimuli for the rest of the scale items. Subjects were asked to think about the brand chosen at the outset and were then asked to respond to the 29 scale items developed in the previous stage as they pertained to the chosen brand. The items were displayed with Likert-style anchors where 1 = Strongly Disagree and 7 = Strongly Agree. Subjects were then asked for demographic information including age, gender and home country.

The initial Cronbach’s alpha of all 29 scale items was 0.96, showing strong internal validity. The alpha score did not show that any single item’s removal would increase the reliability, so all items were retained for the analysis. An initial exploratory factor analysis was run using principal components analysis with oblimin rotation, resulting in a four-factor solution explaining 71.8% of the variance. Examination of the factor loadings showed five items loading weakly on multiple factors. The elimination of these items returned a three-factor solution explaining 72.0% of the variance. Twelve additional items were eliminated sequentially because they were deemed to measure constructs other than Brand Nostalgia. The elimination of these items resulted in a twelve-item, single-factor solution explaining 71.1% of the variance (α=0.96).
At this time, an item that had been eliminated earlier in the process, “As a child I always wanted this brand and some part of me still does” was added back into the item list because this item is highly reflective of the definition of the construct. An additional factor analysis was run and returned thirteen items loading on a single factor explaining 71.8% of the variance. A final review of the scale items was conducted and three items were removed for parsimony because these items were very similar to other items remaining in the scale. Following the elimination of these scale items, a last factor analysis was run and the final ten items loaded on a single factor explaining 71.4% of the variance (α=0.95). The ten items remaining for further analysis are presented in Exhibit 2.

<table>
<thead>
<tr>
<th>Exhibit 2</th>
<th>Exploratory Factor Analysis</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1.</td>
<td>This brand is one of my favorite brands from my childhood.</td>
<td>0.916</td>
</tr>
<tr>
<td>Item 2.</td>
<td>I still feel positive about this brand today because it reminds me of my childhood.</td>
<td>0.909</td>
</tr>
<tr>
<td>Item 3.</td>
<td>I have fond memories of this brand from my childhood.</td>
<td>0.897</td>
</tr>
<tr>
<td>Item 4.</td>
<td>This brand features heavily into happy memories of when I was younger.</td>
<td>0.883</td>
</tr>
<tr>
<td>Item 5.</td>
<td>I have positive emotions towards this brand because I used it when I was younger.</td>
<td>0.871</td>
</tr>
<tr>
<td>Item 6.</td>
<td>When I think back to my childhood, I often fondly recall this brand.</td>
<td>0.851</td>
</tr>
<tr>
<td>Item 7.</td>
<td>Of all the brand I remember from my childhood, this brand was one of my favorites.</td>
<td>0.828</td>
</tr>
<tr>
<td>Item 8.</td>
<td>As a child I always wanted this brand and some part of me still does.</td>
<td>0.799</td>
</tr>
<tr>
<td>Item 9.</td>
<td>This brand was a big part of my life when I was younger.</td>
<td>0.744</td>
</tr>
<tr>
<td>Item 10.</td>
<td>This brand played a larger role in my childhood than other brands.</td>
<td>0.725</td>
</tr>
</tbody>
</table>
Scale Development Study 2

Purification and Confirmatory Factor Analysis with Adult Sample

A second purification study was conducted to further refine the scale, this time using an adult sample. The ten-item scale developed in Study 1 was administered to 309 individuals (92% female, mean age 36.3, range 18-86) through an online social media website. As in Study 1, subjects were asked to spontaneously generate the brand towards which they are the most nostalgic and were instructed to answer the scale questions as they pertained to that brand. Subjects were then given the ten-item Brand Nostalgia scale. Again, a principal components analysis was run using direct oblimin rotation, which resulted in all ten items loading on a single factor explaining 73.3% of the variance (α=0.96). All items loaded above 0.70, but a review of the items led to the removal of one item for comparably lower factor loadings and two items because they were determined to be redundant with higher loading items. The resulting seven items were again analyzed using principal components analysis and the final scale items loaded on a single factor explaining 74.8% of the variance with all factor loadings above 0.80 (α=0.94). All seven items loaded onto the single latent construct of Brand Nostalgia with values greater than 0.75 and significant at p<0.001.

Following the purification step, a confirmatory factor analysis was run using AMOS 20.0. The confirmatory factor analysis returned an acceptable model fit ($\chi^2 = 33.85$, $df = 11$, CMIN/DF = 3.08; NFI = 0.98, CFI=0.99, RMSEA=0.08). Although the Chi-square test was significant, this test is known to be sensitive to sample size (Hu and Bentler, 1999), so a combined cutoff approach was used to determine model fit. Both the NFI and CFI values exceed the suggested cutoff value of 0.95 (Hu and Bentler, 1999).
and, when coupled with the RMSEA value that suggests a good fit for the population, suggests that this model is a good fit to the data. The final seven-item scale is presented in Exhibit 3.

<table>
<thead>
<tr>
<th>Exhibit 3</th>
<th>Final Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>EFA Factor Loading</td>
</tr>
<tr>
<td>1. This brand is one of my favorite brands from my childhood.</td>
<td>0.910</td>
</tr>
<tr>
<td>2. I have fond memories of this brand from my childhood.</td>
<td>0.902</td>
</tr>
<tr>
<td>3. I still feel positive about this brand today because it reminds me of my childhood.</td>
<td>0.894</td>
</tr>
<tr>
<td>4. This brand features heavily into happy memories of when I was younger.</td>
<td>0.861</td>
</tr>
<tr>
<td>5. This brand played a larger role in my childhood than other brands.</td>
<td>0.845</td>
</tr>
<tr>
<td>6. I have positive emotions towards this brand because I used it when I was younger.</td>
<td>0.832</td>
</tr>
<tr>
<td>7. As a child I always wanted this brand and some part of me still does.</td>
<td>0.807</td>
</tr>
</tbody>
</table>
Scale Development Study 3

Convergent and Nomological Validity

The first step in validating the scale developed in Studies 1 and 2 is to demonstrate the convergent validity of the new scale. As no previous scales to measure brand nostalgia exist, I approached convergent validity by seeking to ensure that the individual reports feelings of nostalgia towards the particular brand that match his/her score on the scale. This was done through the use of self-reported nostalgia items developed specifically for this purpose. A full list of the 5 items can be found in Appendix 1. To ensure the nomological validity of the scale, subjects were also presented with scales designed to measure attitude towards the brand, brand commitment, brand loyalty, product loyalty and nostalgia proneness, constructs that are predicted to be closely related to brand nostalgia.

An individual’s attitude has been defined as an individual’s evaluation of a particular object (Ajzen and Fishbein 1977). Attitude towards an object, in this case a brand, can influence individual’s judgments and behaviors about the brand (Ajzen and Fishbein 1977). Attitude towards a brand, much like nostalgia towards a brand, can be related to affective responses about the brand. As such, we would expect to individuals who are nostalgic towards a brand to report more positive attitudes towards the brand than those reported by individuals who are not nostalgic towards the brand.

Brand commitment has been defined as an attitudinal construct leading to a “psychological attachment to a particular brand within a product class” (Traylor 1981). Brand commitment and brand nostalgia are both attitudinal constructs which lead to an attachment to a specific brand. Both of these constructs rely on an individual’s robust
schema to drive the brand preference and both result in preferential selection of the specific brand (Traylor 1981). Therefore, individuals who are nostalgic towards the brand are predicted to exhibit higher commitment to the brand than individuals who are not nostalgic towards the brand.

Brand loyalty has been defined as “a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior” (Oliver 1999). Much like brand commitment, this construct relies heavily on positive affective associations with the brand (Oliver 1999) and is believed to stem from ego involvement because of positive associations with the brand from the individual’s past (Beatty et al. 1988). Brand loyalty stems from a series of positive interactions with the brand, leading to true affection for the brand, and can be used to mitigate a sense of loss from the inability to recapture the past (Oliver 1999). Thus, because the individual’s brand loyalty stems from a long-standing historical interaction with the brand and results in positive affective and attitudinal responses, we would expect individuals who report high levels of nostalgia towards a brand to report similarly high levels of loyalty to the brand.

Product loyalty has been defined as “the preferential attitudinal and behavioral response towards one or more brands in a product category expressed over a period of time by a consumer” (Engel and Blackwell 1982, p 570). Product loyalty again takes into account a long standing relationship with the brand, leading to positive behavioral intentions and increased likelihood of purchase. Therefore, individuals who are nostalgic
towards the brand are likely to exhibit higher levels of product loyalty as well as brand loyalty.

Finally, nostalgia proneness was selected to test the nomological validity of the new scale because it has been proposed that individuals who are nostalgia prone also have an increased tendency to engage in nostalgic bonding (Holbrook and Schindler 2003). As discussed in the introduction chapter, when an individual is nostalgia prone, he/she is likely to think positively about items that were more prevalent in the past. Individuals who are more nostalgia prone are therefore expected to exhibit higher levels of brand nostalgia.

To test these relationships, 95 undergraduate students (22.1% male, 92.6% between 18 and 25 years old, age range 18 to 44 years) were asked to generate a brand towards which he or she is nostalgic and to respond to the seven-item scale developed in Study 2 as it pertained to these brands. After completing the Brand Nostalgia scale, subjects were asked five questions to determine self-reported brand nostalgia. The self-reported nostalgia scale was designed to demonstrate convergent validity by showing that the brands for which consumers scored high on the scale were also the brands that they reported being nostalgic toward when asked. The self-reported brand nostalgia questions are presented in Appendix 1. Subjects were then asked to respond to measures of the nomological validity constructs, including Shamdasani, Stanaland and Tan’s (2001) Attitude Towards the Brand scale, Yoo, Donthu and Lee’s (2000) Brand Commitment scale, Ailawadi, Neslin and Gednek (2001) Brand Loyalty scale, Campo, Gijsbrechts and Nisol’s (2000) Product Loyalty scale, and Holbrook’s (1993) Nostalgia Proneness scale. These scales can be found in Appendix 1.
The Brand Nostalgia scale was found to have an alpha of 0.94 while the self-reported brand nostalgia measure had an alpha of 0.83, confirming acceptable internal validity. The correlation between this measure and the Brand Nostalgia Scale was $r=0.69$, $p<0.001$, demonstrating convergent validity between the scales.

The nomological validity scales were also found to have acceptable levels of internal validity (Attitude Towards the Brand $\alpha=0.97$, Nostalgia Proneness $\alpha=0.72$, Brand Loyalty $\alpha=0.77$, Product Loyalty $\alpha=0.71$, Brand Commitment $\alpha=0.74$). As expected, the newly developed Brand Nostalgia scale was found to be positively correlated with each of the scales tested: Attitude Towards the Brand ($r(95) = 0.63$, $p<0.001$), Nostalgia Proneness ($r(95) = 0.28$, $p<0.01$), Brand Loyalty ($r(95) = 0.41$, $p<0.001$), Brand Commitment ($r(95) = 0.41$, $p<0.001$) and Product Loyalty ($r(95) = 0.38$, $p<0.001$), supporting nomological validity. A summary of these values can be found in Exhibit 4.

<table>
<thead>
<tr>
<th>Exhibit 4</th>
<th>Construct Validity Tests</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convergent Validity:</td>
<td>Self Reported Nostalgia</td>
<td>0.69**</td>
</tr>
<tr>
<td>Nomological Validity:</td>
<td>Attitude Towards the Brand</td>
<td>0.63**</td>
</tr>
<tr>
<td></td>
<td>Nostalgia Proneness</td>
<td>0.28*</td>
</tr>
<tr>
<td></td>
<td>Brand Loyalty</td>
<td>0.41**</td>
</tr>
<tr>
<td></td>
<td>Product Loyalty</td>
<td>0.38**</td>
</tr>
<tr>
<td></td>
<td>Brand Commitment</td>
<td>0.41**</td>
</tr>
<tr>
<td>Discriminant Validity:</td>
<td>Vividness of Memory</td>
<td>-0.13</td>
</tr>
<tr>
<td></td>
<td>Intensity of Memory</td>
<td>-0.19</td>
</tr>
<tr>
<td></td>
<td>Valance of Memory</td>
<td>0.07</td>
</tr>
</tbody>
</table>

*p<0.01, **p<0.001
Study 4

Discriminant Validity

A fourth study was conducted to test the discriminant validity of the newly developed scale. As brand nostalgia concerns positive affect towards the brand due to its association with the individual’s lived past, it is possible that individual responses to the Brand Nostalgia scale may unintentionally be influenced by the nature of the individual’s memories of his/her lived past. Specifically, individuals who have stronger, more vivid, or happier memories of their childhood may be more likely to respond high to the scale items regardless of their true brand nostalgia. To test this possibility, a sample of 51 undergraduate students (39% male, 29% between 18 and 25 years old, range 18 to 49 years) was asked to respond to the seven Brand Nostalgia scale items found in Exhibit 3 as well as scales designed to measure the vividness of childhood memories (Sutin and Robins 2007), emotional intensity of childhood memories (Sutin and Robins 2007), and valance of childhood memories (Sutin and Robins 2007), all taken from their Memory Experiences Questionnaire (MEQ). Please see Appendix 1 for scales.

The three discriminant validity measures were all found to have acceptable levels of internal validity (Vividness $\alpha=0.82$, Emotional Intensity $\alpha=0.68$, and Valence $\alpha=0.91$). As predicted, the Brand Nostalgia scale was not significantly correlated with any of the three discriminant validity measures, suggesting that the newly developed scale is not measuring any of the memory constructs listed. These results are summarized in Exhibit 4.
Study 5 – Verification of Word Choice

In order to confirm that the use of the words “child” or “childhood” as opposed to “youth” or “past” did not bias responses to the scale, a study was conducted in which half of the respondents were shown “child” language while the other half were shown “youth” language. The actual items used can be found in Exhibit 5, below.

Exhibit 5

**Childhood Language:**
This brand is one of my favorite brands from my childhood
I have fond memories of this brand from my childhood
I still feel positive about this brand today because it reminds me of my childhood
This brand features in happy memories of when I was a child
This brand played a larger role in my childhood than other brands
I have positive emotions towards this brand because I used it when I was a child
As a child I always wanted this brand and some part of me still does

**Youth Language:**
This brand is one of my favorite brands from when I was younger
I have fond memories of this brand from when I was younger
I still feel positive about this brand today because it reminds me of my past
This brand features in happy memories of when I was younger
This brand played a larger role in my youth than other brands
I have positive emotions towards this brand because I used it when I was younger
When I was younger, I always wanted this brand and some part of me still does

Fifty-six undergraduate students (25% male, μ=21.8 years old, σ=3.01, range= 20-40 years old) were recruited to participate in exchange for extra credit. Subjects were first asked to respond to the Brand Nostalgia and Self-Reported Nostalgia scales for Lucky Charms cereal, and were then asked to spontaneously generate a brand towards which they were nostalgic and respond to the brand nostalgia and self-reported nostalgia items for the selected brand. The self-reported nostalgia items were found to have alphas of 0.93 for the Lucky Charms condition and 0.92 for the self selected brand condition. The
Brand Nostalgia scale was found to have alphas of 0.95 for the Lucky Charms condition and 0.93 for the self-selected brand.

Two subjects returned values below 3.5 out of 7 on self-reported nostalgia for the self-selected brand and were eliminated from further analysis to avoid biasing the results. One-way ANOVAs were run for each brand condition (Lucky Charms and self-reported brand) using language type (childhood vs. youth) as the factor. No statistically significant difference between language types was found for the Lucky Charms condition \((F(1,53)=0.331, p=0.568)\) nor the self-reported brand condition \((F(1,53)=0.400, p=0.530)\), suggesting subjects did not respond differently to the items using the “childhood” language when compared to those using the “youth” language.

In order to show that both language types accurately predicted self-reported nostalgia, linear regressions were run using brand nostalgia as the independent variable and self-reported nostalgia as the dependent variable. Results from these regressions can be seen in the table below. For each regression, the brand nostalgia scale was found to significantly predict self-reported nostalgia for the brand.

<table>
<thead>
<tr>
<th>展</th>
<th>(\beta)</th>
<th>t-score</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lucky Charms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood</td>
<td>0.783</td>
<td>6.29</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Youth</td>
<td>0.654</td>
<td>6.54</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Self-Selected</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood</td>
<td>0.830</td>
<td>7.44</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Youth</td>
<td>0.824</td>
<td>7.27</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

These results suggest that, in most cases, the terms “youth” and “childhood” can be used interchangeably with no discrepancy in results. This increases the applicability of the
scale by allowing the youth/childhood language to be tailored to match the population being studied.

**Final Scale**

After conducting five studies designed to develop the scale and test the convergent, nomological, and discriminant validity of the items, I arrived at the final scale to measure the construct Brand Nostalgia. The final scale items are presented in Exhibit 7. This scale will be used in three studies, described in Chapters 4 and 5, to test the hypotheses developed in Chapter 2.

<table>
<thead>
<tr>
<th>Exhibit 7</th>
<th>Final Scale Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have fond memories of this brand from my childhood.</td>
<td></td>
</tr>
<tr>
<td>This brand played a larger role in my childhood than other brands.</td>
<td></td>
</tr>
<tr>
<td>This brand is one of my favorite brands from my childhood.</td>
<td></td>
</tr>
<tr>
<td>I still feel positive about this brand today because it reminds me of my childhood.</td>
<td></td>
</tr>
<tr>
<td>I have positive emotions towards this brand because I used it when I was younger.</td>
<td></td>
</tr>
<tr>
<td>This brand features in happy memories of when I was younger.</td>
<td></td>
</tr>
<tr>
<td>As a child, I always wanted this brand, and some part of me still does.</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 4

Exploration of the Schematic Structure of Brand Nostalgia

In this chapter, I seek a better understanding of how individuals become nostalgic for specific brands, what types of brands individuals develop brand nostalgia for and how this nostalgia affects individual’s schematic structures for that brand. As discussed in Chapter 2, it is expected that individuals who are nostalgic for a brand will have a more affect-laden schematic representation of the brand. The inclusion of this information in the schema, as well as the positive memory bias expected for nostalgic brands, suggests that individuals who are brand nostalgic will report more detailed and more affect laden memories of the brand than will individuals who are not brand nostalgic. This study will examine this assertion and explore the schematic differences between memories for nostalgic brands and those for non-nostalgic brands.

Procedure –

The data for this study was collected over a two-week period with the interviews conducted by the author of this dissertation. Twenty-nine undergraduate students ranging in age from 20 to 46 years old (45% male, μ=23.0 years, σ=5.45) were recruited to participate in short one-on-one interviews lasting between 10 and 20 minutes. The interviews were conducted in a conference room at large Midwestern university. The goal of the interviews was to have each subject share schematic information for a self-selected nostalgic brand as well as a common brand to be discussed by all subjects. The discussion of the self-selected brand allowed the interviewer to learn about the memories and affect associated with a nostalgic brand, while the discussion of the common brand allowed for differences in schema structure for nostalgic and non-nostalgic brands to be
explored. Subjects were compensated with extra credit and a small gift card to a local coffeehouse. Subjects were advised that audio recordings would be made of the interview and were then asked to discuss two brands: Lucky Charms cereal and a second brand spontaneously generated by the individual as one he or she was nostalgic towards.

To select a common brand for discussion, a review of the self-reported nostalgic brands collected over the course of validating the Brand Nostalgia scale was conducted. A complete list of the spontaneously generated nostalgic brands can be found in Appendix 2 for those reported by undergraduate students and Appendix 3 for those reported by the non-student sample. One brand that was identified by many individuals in both samples was Lucky Charms cereal. As Lucky Charms was regularly identified as a brand towards which individuals are nostalgic, this brand was selected as the common brand to be discussed by all subjects. It was expected that subjects would report varying levels of brand nostalgia towards Lucky Charms, allowing for comparisons of schematic structure both across brands as well as within brands.

After an introduction to the study, subjects were asked to discuss their memories of and feelings towards Lucky Charms cereal. Further questions were posed to draw additional information from the subjects, and schematic information for Lucky Charms cereal was discussed until each subject indicated that he or she had exhausted his or her schematic knowledge of the brand. Following the discussion of Lucky Charms cereal, subjects were asked similar questions regarding the brand he/she had selected. In many cases, subjects recalled memories and schematic information for multiple brands. Each brand was discussed until the subject either indicated they had shared all they were
willing to share or when the subject organically shifted the discussion to another brand.

A copy of the interview guide may be found in Appendix 4.

Following the completion of the interview, subjects were asked to complete the
Brand Nostalgia scale, the Attitude Towards the Brand scale, and behavioral intentions
questions for Lucky Charms cereal and for one of the generated brands discussed in the
interview. Several subjects indicated brand nostalgia towards multiple brands and were
asked to select one to use when answering the scale items.

After all of the interviews had been completed, the audio files were transcribed
and the interviews reviewed by the author of this dissertation to identify recurring themes
in subject responses. As the themes were identified, individual subject responses were
coded with a “yes” or “no” to indicate whether each theme was found. A composite
score for brand nostalgia, attitude towards the brand and behavioral intentions was
created by averaging subject responses to the scales for each brand. These values were
used to show where each subject’s brand nostalgia fell on a continuum with 1 indicating
very low brand nostalgia and 7 indicating very high brand nostalgia. The addition of this
measurement allowed the researcher to determine whether the individual felt nostalgic for
the key brands discussed and to better understand what types of memories were
associated with nostalgic brands as opposed to non-nostalgic brands. Through analysis of
the interviews, significant differences in the types of memories recalled for brands
towards which the individual was nostalgic and was not nostalgic began to emerge.
Sample Description -

Of the twenty-nine subjects participating, all but one subject was familiar with Lucky Charms cereal, the remaining twenty-eight having consumed it at some point in their lives. Nearly half of the subjects reported brand nostalgia for Lucky Charms at or above 4.50, the midpoint of the Brand Nostalgia scale. A full list of participants, including brands towards which each is nostalgic and his or her brand nostalgia scores for both Lucky Charms cereal and a self-selected brand can be found in Exhibit 8.
<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Nostalgic Brand</th>
<th>Brand Nostalgia Score</th>
<th>Lucky Charms Brand Nostalgia Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>mid 20's</td>
<td>Kentucky Fried Chicken</td>
<td>5.43</td>
<td>n/a</td>
</tr>
<tr>
<td>Male</td>
<td>n/a 20's</td>
<td>n/a</td>
<td>n/a</td>
<td>5.57</td>
</tr>
<tr>
<td>Male</td>
<td>n/a 20's</td>
<td>n/a</td>
<td>n/a</td>
<td>6.29</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>Ramen Noodle</td>
<td>n/a</td>
<td>1.71</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>Fisher Price Little People and Coupe Cars / Oshkosh</td>
<td>n/a</td>
<td>5.29</td>
</tr>
<tr>
<td>Male</td>
<td>22</td>
<td>TMNT/X-Men</td>
<td>6.00</td>
<td>5.57</td>
</tr>
<tr>
<td>Male</td>
<td>24</td>
<td>Cleveland Indians</td>
<td>5.00</td>
<td>1.43</td>
</tr>
<tr>
<td>Male</td>
<td>21</td>
<td>Cartoon Network/Lunchables</td>
<td>5.14</td>
<td>3.29</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>White Christmas/Sound of Music</td>
<td>6.57</td>
<td>3.00</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>Breyers Ice Cream</td>
<td>6.71</td>
<td>3.43</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>Nike</td>
<td>6.00</td>
<td>4.14</td>
</tr>
<tr>
<td>Male</td>
<td>23</td>
<td>GI Joe</td>
<td>6.86</td>
<td>3.14</td>
</tr>
<tr>
<td>Male</td>
<td>22</td>
<td>Super Nintendo</td>
<td>7.00</td>
<td>6.14</td>
</tr>
<tr>
<td>Male</td>
<td>21</td>
<td>Liverpool Football Club</td>
<td>6.57</td>
<td>2.43</td>
</tr>
<tr>
<td>Female</td>
<td>33</td>
<td>My Little Pony/Rainbow Brite/Teddy Ruxpin/Heart to Heart Bear</td>
<td>7.00</td>
<td>5.29</td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td>Chevy Corvette</td>
<td>6.14</td>
<td>4.00</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>Barbie</td>
<td>6.86</td>
<td>6.00</td>
</tr>
<tr>
<td>Female</td>
<td>21</td>
<td>American Girl Dolls</td>
<td>6.57</td>
<td>3.43</td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td>Lion King</td>
<td>6.43</td>
<td>6.43</td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td>Lego’s</td>
<td>6.71</td>
<td>5.00</td>
</tr>
<tr>
<td>Female</td>
<td>21</td>
<td>Hot Wheels</td>
<td>5.86</td>
<td>5.57</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>Coca-Cola</td>
<td>7.00</td>
<td>4.14</td>
</tr>
<tr>
<td>Female</td>
<td>23</td>
<td>Tide Detergent</td>
<td>4.86</td>
<td>5.86</td>
</tr>
<tr>
<td>Female</td>
<td>27</td>
<td>Disney Movies</td>
<td>6.86</td>
<td>1.57</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>Disney</td>
<td>7.00</td>
<td>6.57</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>Disney</td>
<td>6.43</td>
<td>4.86</td>
</tr>
<tr>
<td>Male</td>
<td>46</td>
<td>Star Wars</td>
<td>7.00</td>
<td>5.14</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>Aladdin</td>
<td>7.00</td>
<td>4.86</td>
</tr>
<tr>
<td>Female</td>
<td>24</td>
<td>Coca-Cola</td>
<td>6.43</td>
<td>2.43</td>
</tr>
</tbody>
</table>
Continuation of Usage

When analyzing the usage patterns of nostalgic brands, two distinct patterns emerged. Sixteen subjects indicated current, if somewhat infrequent, usage of the nostalgic brand while 11 reported that they no longer use the brand. One subject viewed his nostalgic brand, the Chevrolet Corvette in the same model his grandfather had owned, as an aspirational item. These usage differences appear to be affected by specific product attributes and categories.

Current Usage

Many subjects reported current usage of the brands towards which they are nostalgic, particularly if the brands in question were in specific product categories such as foods, sports teams, and movies. These subjects frequently reported usage of the brand as a way to reconnect with friends or family or as a way to recapture the “good old days.” For example, one subject identified Ramen Noodles as a food she regularly consumed with her best friend from across the street, still reaches out to that friend when she consumes the item while another subject who identified Breyers ice cream as the brand which holds the most nostalgia, continues to consume the brand, now that she’s left home. A third subject reported regularly re-watching the Christmas movies she and her family used to watch when she was younger,

“[T]here were like a couple movies, like, as a kid that I really loved. *The Sound of Music, The Sound of Music* and *White Christmas*. I still love to watch *White Christmas* with my family, at Christmas time or what not. Um, it was just one of
the movies I always watched with my mom and, so, sometimes I watch them,”
(female, 22, high brand nostalgia).

Other subjects reported the consumption of favorite childhood foods as a special treat, to be consumed only on special occasions. One subject (male, 46) described going through his children’s Halloween candy looking for the candy he remembered most fondly from his own Trick or Treating days, the Reece’s Peanut Butter Cup. Another subject talked about his consumption of Kentucky Fried Chicken and his tendency to consume it only when he was searching for a way to reconnect with his past,

**Lapsed Usage** –

While the more than half of the subjects interviewed continue to consume their brand to some degree, even into adulthood, eleven subjects reported that they no longer consume their brand. These brands, whose usage has lapsed, are more frequently found in two product categories, food and toys. In the case of food brands, many subjects felt that they had moved away from the brand, either because it is no longer available for purchase or because of other life decisions that mean that the brand is no longer suitable for consumption. For example, one subject reported that although he routinely consumed Lucky Charms cereal as a child, his move to vegetarianism as an adult means that he can no longer consume the marshmallows in the cereal as they contain gelatin (male, 21). This same subject talked about his love for Kraft Lunchables prepackaged meals but no longer consumes them because they all contain animal products. He suggested that if a vegetarian option was made available, he would readily consume the brand again.
Other subjects cited health concerns as reasons they have moved away from consumption of their nostalgic brand. Several female subjects reported that no longer consume Lucky Charms cereal because they prefer to eat a healthier diet or because they chose not to consume breakfast, or food items associated with breakfast, as a way to be healthier. One subject suggested that he no longer consumes the cereal because it is perceived as an unhealthy choice.

“I’m not a cereal person so I don’t really know. I just think of it as, you know, you don’t see too many adults eating it. It’s more of a kid; I wouldn’t really think it’s that healthy,” (male, 24, brand nostalgia score 1.43).

From the initial descriptive information obtained in this study, it is clear that brand nostalgia is a rich and complex phenomenon. Subjects have reported brand nostalgia for brands across many product categories including toys, movies, foods, cars, sports teams, restaurants, and clothing brands. Further, subjects reported both lapsed and continuous usage of the brands, indicating that brand nostalgia may exist for brands left in the past but can also remain an important component in the current consumption of brands. The section below examines the deeper emergent themes, based on the descriptive information found.
Emergent Themes

Episodic Memories

Of the subjects who reported higher levels of brand nostalgia, ten reported episodic memories involving Lucky Charms cereal. As was discussed in the theory chapter, it has long been known that an individual’s schema for a particular item may contain affective and attitudinal information, in addition to semantic details. As such, it is not surprising that individuals who scored above the midpoint on the Brand Nostalgia scale for Lucky Charms cereal reported primarily episodic memories for the brand, for example:

“To me, Lucky Charms brings back childhood memories because that’s what I always ate as a kid. I enjoyed the marshmallows; it brings joy to a little kid, of course. It’s like a little dessert with breakfast. In the mornings I would wake up and my dad would always there, he didn’t go into work until later. I would eat my bowl of Lucky Charms and he would eat his bowl of Life cereal. It was kind of family bonding, right from the start of the morning,” (male, 20-years-old, 6.43 brand nostalgia score).

“I think of when I was little and how I used to like the little marshmallows in there and I would never want to eat the cereal but I would just want to eat the marshmallows out of it. So everything besides the marshmallows was left when I was little. I would
never want to eat the actual cereal,” (female, 22-years old, 5.29
brand nostalgia score).

Conversely, individuals who reported low levels of brand nostalgia reported
memories comprised almost entirely of semantic, non episodic memories:

“It’s just a cereal, with, um, it’s a cereal with a leprechaun, a green
leprechaun on it. I grew up eating, I grew up with it. Uh, ate some
when I was a kid but it wasn’t my favorite, to be honest,” (male,
21-years-old, 2.43 brand nostalgia score).

These differences are even more pronounced when subjects are asked to
spontaneously generate a brand towards which he or she is nostalgic. Of the twenty-nine
subjects, only 4, three male, one female, did not provide episodic memories for the brand
he or she self-selected. Indeed, these memories were often more powerful and more
evocative than those recalled for Lucky Charms cereal. One subject recalled one
Christmas when she received a toy for which she had been longing:

“The Heart to Heart Bear, I remember it was the year my sister
wanted Pound Puppies so she asked Santa for Pound Puppies, I
wanted the Heart to Heart Bear and I remember my sister
Christmas morning waking up screaming of excitement because
the Pound Puppies were sleeping in her bed. I started to cry, I
went downstairs, or, I didn’t cry. I cried after I went downstairs
and looked at the tree and there was nothing under the tree for me
from Santa. I started to cry and my mom goes “Go upstairs in your
room” and I went upstairs to my room and he was there sleeping
with me the whole night. Oh, my God, I can’t believe I’m crying
about it now but it was like my [two] favorite Christmases.”
(female, 33, high brand nostalgia)

Very little semantic information is recalled in this memory, but instead the subject
focused on the emotions and memories of the morning when she woke up to find the bear
she had been hoping for, tucked into bed right next to her. The emotions were strong
enough that they affected her as she was retelling the story; this subject began crying as
she retold the story.

Another subject, after talking about her American Girl Dolls, described an
occasion she had to visit the American Girl Dolls store in the Mall of America in
Bloomington, Minnesota:

“I went to Minnesota this summer and in the Mall of America they
have a store, this is going to be so dumb, but I felt bad going in [The
American Girl Doll Store] without my doll so I was like ‘I can’t even
go, I can’t even go.’ I was super melodramatic about it, too. Like she
would be mad because as a child I was like ‘I promise I’ll take you
there! We’ll go have lunch together!’ and now I can’t go. I missed
my chance. I can’t go without her,” (female, 21, very high brand
nostalgia).

These responses begin to provide evidence of the differences in schematic
structure for brands towards which the individual is nostalgic, compared to those towards
which the individual is not nostalgic. More specifically, when an individual is nostalgic towards a specific brand, the schema components that are more easily recalled are those associated with affect or episodic memories, rather than semantic information.

**Ritualized Consumption**

Another theme that emerged during review of the studies was the tendency of brand nostalgic feelings to grow from brands that were consumed ritually, rather than as a one-off experience. Some literature, such as the concept of the flash-bulb memory, would suggest that individuals would be more inclined to be nostalgic for brands with one single, significant memory while other literature would suggest that, because nostalgic memories are an amalgamation of many experiences, combined into a single, affect laden memory (Hirsch 1992). Indeed, Belk, Wallendorf and Sherry (1989) identify ritual as a necessary step in an item transitioning from the profane to the sacred. In this study, evidence suggesting that both paths can assist in the development of brand nostalgia was found.

Five subjects identified single-memory moments that lead to the transition of their brand from one towards which they were positively inclined to one they were nostalgic towards. However, of those five subjects, only one indentified only that single experience as being the catalyst towards his brand nostalgia. This subject, a man in his early 20’s who was raised in China, talked animatedly about his first experience with Kentucky Fried Chicken at a surprise birthday party thrown for him by his parents when he was 6 or 7 years old:
“The first time when I know the brand is when I was about six or seven years old. At that time I heard this brand, because, first, I’m from China, it first went to China and open it soon become pretty popular. Like every kid was pretty willing to try the new wisdom brand, wisdom flavored food. At that time, I was pretty young and, I heard other, my friends, they went there. They, to my surprise, they told me, after eating there they also can get some free toys. I mean, it was the first time I heard [of] a restaurant which can provide toys. Then it [was] really, attracting me and motivating me to go and try so actually, my dad and my parents actually, to my surprise, the birthday, they held a birthday party in the Kentucky Fried Chicken where they brought like, all my kid friends to came together and, we just played games in the Kentucky Fried Chicken and the accepted eating, those, I mean to me those a new flavor food and I also get a very fun experience, like, can play those toys and also have a, I remember at that time us have assistant which could, just, guide us how to play, uh, those games and, that’s pretty, [laughs] I mean, yeah, like it’s very different from, like a traditional birthday party I had in China. Cause, the first time I can play in the birthday party. That’s pretty, very, sounds interesting.” (male, mid-20’s, high brand nostalgia)
While this subject reported a single, highly significant memory, he reported having consumed the brand multiple times, following the initial memory and reported recalling the initial memory during subsequent visits.

More frequently recalled, however, were examples of ritualized or repetitive memories of the brand. Twenty-five subjects reported these types of memories for their nostalgic brand. For example, one subject talked about her experiences consuming Coca-Cola:

“At every family party, or, like a Super Bowl party, we always have regular Coke as an option, or Diet Coke or something like that. Just always having it there,” (female, 20-years-old, high brand nostalgia).

Another subject talked about her love for chocolate Breyers ice cream, and how it was ritualistically consumed as part of a daily meal.

“It was just the brand of ice cream that my mom always bought and I’m pretty sure every single night I would have a bowl of Breyers ice cream after dinner. That was just something, chocolate, always chocolate. That was just something that reminded me of my childhood,” (female, 20-years-old, high brand nostalgia).

Another subject reported brand nostalgia towards The Cartoon Network and described his Saturday morning ritual of waking up and watching favorite shows such as *Dexter’s Lab* and *The Power Puff Girls* with his brother,
“The first thing that came to mind when you said that [brand nostalgia] was actually the TV channel “Cartoon Network.” I don’t know, when I was a kid that was like my favorite channel ever. I would always wake up early on Saturdays to watch that channel so it was sort of one of those things where I don’t even watch TV now but it’s like a comforting thought like, ‘oh, as a kid I loved that channel,’” (male, 21, high brand nostalgia).

It appears that individuals can become nostalgic for brands through either repeated, ritualistic consumption or though one single, highly salient experience, followed by additional, ritualized consumption. However, not all brands that are ritually consumed will become nostalgic relationships. It appears that an additional component, social connectedness, is a necessary factor in the development of brand nostalgia.

**Social Connectedness**

A final theme that emerged over the course of the interviews was the consistent involvement of family or friends in memories for the nostalgic brand. While most of the memories of brands with low nostalgic cache did not involve family and friends or involved them only in passing (ex. I used to ask my mom to buy me Lucky Charms), the memories of brands self-selected as a nostalgic brand included family or friends without exception.

Most frequently, the family member was heavily involved in the consumption ritual or the brand is viewed as a way to connect with a family member. For example,
one subject discussed his brand nostalgia for the Cleveland Indians and preferred to think of the brand in the terms his grandfather would have known:

“I still call it Jacob’s Field, not Progressive. I do remember going to the field, my grandpa was big into it so I remember about him. He died when I was pretty young so there’s a pretty big life connection there.” (male, 24, high brand nostalgia)

Another subject had inherited GI Joe action figures from his father and expressed that the brand nostalgia he feels is amplified by his father’s own nostalgia for the brand:

“Growing up some of my favorite toys were GI Joes and they had made and manufactured those and I also had some vintage GI Joes from when my dad was a child so those were particularly nostalgic, just to think of the fact that he had also played with those same toys at a similar age and with his brother. I remember that my dad and I would always play with them and hash out different missions. I had a lot of different accessories, the vehicles were usually my favorite to play with. We would camp a lot and do outdoor activities so kind of like outfitting them for stuff like that was always pretty enjoyable.” (male, 23, high brand nostalgia).

Another subject described his experiences watching the Star Wars movies and the freedom that accompanied his original viewings of the movies:

“It was one of the few types of movies that my parents would let us [the subject and his two sisters] go, by ourselves, you know, cause
it was, there was violence in it but it was clean, Star Wars violence, I guess.” (male, 46, high brand nostalgia)

Friends also played a large role in the memories of brand nostalgic brands. One subject discussed the consumption of Ramen Noodles which she shared with a friend:

“My friend and I used to always call it “Oodles of Noodles” so like even to this day when I eat it, it’s like “Oodles of Noodles” and people will be like “what’s Oodles of Noodles” and I don’t even know. We would always…she lived across the street so it was always like our afternoons snack or whatever and we would always try different things with it, like we’d put hot sauce in it, or like, something like that, just to see what could make it better, but, I can’t think of any other, I mean it was just like always our afternoon thing that we had.” (female, 22-years-old, high brand nostalgia).

The schemas for brands that subjects identified as those towards which they were nostalgic all had an additional component not found in the schemas for the brands towards which the individuals are not nostalgic. Specifically, the involvement of important others, be they friends or family, seem to be an important component in the formation of brand nostalgia.

Another component of social connectedness and brand nostalgia emerged as subjects identified brands toward which they are nostalgic was the passing on of brands to future generations. The same subject who refused to visit the American Girl Doll store
spoke about her Barbie dolls and how she has preserved them to pass on to her future children:

“They’re all safely tucked away in my basement for when I have a child and they can love Barbies just as much as I did. I’m kind of sad now about how Barbie is not as cool as she was…My kids will love Barbie just as much as I did. I will instill that in them.”
(female, 21, very high brand nostalgia).

This pattern of preserving nostalgic brands was found across multiple subjects and was found to actually occur in subjects with younger family members, including nieces, nephews, siblings and children.

Many of the subjects talked about the desire to pass on the love of the brands towards which they are nostalgic to the younger generation. Several subjects talked about enjoying seeing their younger family members engage with brands they were nostalgic for. One subject discussed her joy in seeing her much younger brothers experience Disney World for the first time and her ability to view the park through their eyes, making her remember her first experience visiting the park and how magical it all seemed.

Another subject talked about her experiences with the Fisher Price coupe cars and how she and her sister bonded over the rides they would take up and down the street. She mentioned her happiness at seeing children today playing with the same toys, in the same manner as she did as a toddler:
“[M]y grandparents actually told us the other day that a little family moved in across the street from them and they have one of those, even still, they still exist, even with all the technology and she said that there were two little girls and they reminded them of me and my sister going down the street in our little cars so it was kinda cool.” (female, 22, high brand nostalgia)

Most interestingly was the passing down of nostalgic brands to the individual’s children. Three subjects self identified as parents and each discussed ways in which they had passed on their nostalgic brands to their children. One subject, a 46-year-old father of two teenage boys talked about his nostalgia for the Atari gaming systems that were popular when he was younger. Although he never had one himself, he recalled visiting friends houses and playing with their Ataris. As a result, he has made sure that his sons were given gaming systems and games as gifts when requested. Although the Atari brand exists today, modern Atari gaming systems are not produced so these brands are not desired by his sons yet the nostalgia for this brand leads him to purchase the desired gaming systems for his sons.

Another subject, a 27-year-old mother with a 4-year-old son described the manner in which she shares her brand nostalgia for Disney movies with her child; “I’m big on ‘he has to watch this one [Lady and the Tramp] and this one [Cinderella] and this one.’” She further discusses her preference for letting her son play with brands that she remembers her brothers playing with:
“He’s [her son] been bringing up Spiderman a lot and I’m like,

‘No, no. I would go for Ninja Turtles or Batman because my
brother absolutely loved Batman and the Ninja Turtles so, but he
does honestly like the Ninja Turtles, but because Spiderman I have
no emotional connection to, I’m like ‘eh.’”

While many parents are enthusiastic about encouraging their children to enjoy the
brands towards which they are nostalgic, one mother expressed reservations about
allowing her daughter to play with “her” toys until she was old enough to properly care
for them, instead buying similar but different items for her daughter to play with until the
3-year-old is old enough.

“I haven’t given her my Little Ponies yet because she ended up
getting the My Little Ponies that are at Target now and the hair
turns so, like, natty, because of her sticky little fingers so I thought
‘okay, she’s still not ready for MY Little Ponies.’ So, I’m waiting
until she’s a little bit older, when she’s ready to start combing hair
and stuff,” (female, 33, high brand nostalgia).

Interestingly, this subject reported disliking the newer version of My Little
Ponies, in part because of their appearance and in part because of the content of the
cartoon show but she overlooked her dislike for the modern version to find a way to share
her brand nostalgia with her daughter, while at the same time keeping her own ponies
safe until her daughter is old enough to treat them with the respect she feels they deserve.
Further, she admitted to having kept the ponies safe in the years since she played with
them with the intent purpose of passing them on to her children yet hasn’t yet been able to make the transition.

These findings suggest that the relationship between an individual and the brand towards which he or she is nostalgic is one that helps connect the individual to others. The social connectedness component is especially interesting here as it not only connects individuals to others from their past, but also serves to connect individuals to younger generations, both current and anticipated.

**Discussion**

The concept of brand nostalgia as a facet of the brand/consumer relationship has been examined in passing in the brand relationship literature (Fournier 1998, Smit, Bronner and Tolboom 2006). This study has furthered the understanding of the ways in which the schematic information of brands towards which an individual is nostalgic differs from the schematic structure of a brand towards which an individual is not nostalgic.

Over the course of twenty-nine interviews, several themes became apparent. As expected, individuals reported more complex, affect-laden schemas for brands towards which they are nostalgic, suggesting that brand nostalgia is driven by more than simply positive experiences using the brand in the individual’s past. In all cases, the brand towards which the individual is nostalgic was recalled in conjunction with memories of friends or family, in line with Fourier’s assertion that the nostalgic brand relationship is an “infrequently engaged, affect laden relation reminiscent of earlier times [that yields] comfort and security of past self,” (1998).
In congruence with nostalgia (Hirsch 1992) and brand relationship theories (Belk, Wallendorf and Sherry 1989), many subjects reported memories that were amalgamations of multiple, frequently ritualistic, experiences. The ritualistic nature of the consumption experience appears to play a large, but not exclusive, role in the development of brand nostalgia. It seems that consumption experiences must be repeated multiple times in order for them to lead to brand nostalgia. While several subjects reported a key, sharp memory of his or her introduction to the brand, for example the first experience at Kentucky Fried Chicken, in each case the consumption experience was not limited to that single introductory moment but instead progressed towards the ritualistic consumption behaviors experienced by other subjects.

Another key theme that emerged over the course of this study is the necessary schematic connection of the nostalgic brand to friends and family. It is clear that the connection to friends and family is a key factor in a brand becoming a nostalgic brand. Indeed, every brand nostalgia example given by the subjects included the involvement of friends and family. This aligns with previous findings in nostalgia literature which have suggested that consumption of a nostalgic brand can be used to increase feelings of social connectedness (Wildschut et al. 2006; Loveland et al. 2010).

Further, it appears that for an individual to become nostalgic towards a specific brand requires far more than just usage of the brand in the individual’s past. While many of the recollections for non-nostalgic brands centered on semantic or impersonal information, every memory for a nostalgic brand involved memories of family or friends, suggesting that the inclusion of these types of memories will predispose an individual to develop brand nostalgia for that brand at a later date. The complexity of the brand
nostalgia relationship also passes on to future generations. While both of the mothers in the study were reluctant to let their children consume Lucky Charms cereal, both expressed fervent desires to have their children love the brands towards which they were nostalgic. This behavior was not limited to the parents in the study. Many subjects reported having carefully saved his or her nostalgic toys to share with future offspring. Others experienced joy and nostalgia when observing younger siblings or even unknown children play with the same brands they enjoyed as children.

This qualitative study is one of the first to examine how nostalgic brand relationships develop. The findings of this study suggest that the schema for an individual’s nostalgic brand will be structured differently than those for brands towards which the individual is not nostalgic. By storing and recalling affective information, along with episodic memories for the brand, the schema becomes a richer, more complex memory for that brand. This study has also established the different ways in which individuals relate to brands towards which they are nostalgic, leading to the main question to be examined in this dissertation, “how do individuals who are nostalgic for a particular brand respond to changes in that brand?” The next chapter will seek to understand what, if any, moderating effects brand nostalgia will have on consumer responses to changes in the brand.
Chapter 5

Moderating Effects of Brand Nostalgia on Response to Changes in a Brand

Study 1 – Manipulations to a Single Brand – Undergraduate Sample

The goal of Study 1 is to test Hypotheses 1 and 2. Hypothesis 1 states that individuals who are nostalgic towards the brand will perceive a greater degree of change to the brand than will individuals who are not nostalgic toward the brand. Hypothesis 2 examines the moderating effect that an individual’s brand nostalgia will have on his/her response to changes in the brand. As such, Hypothesis 2 is examined with three sub-hypotheses:

- Hypothesis 2a states that when the change to the brand is small, both nostalgic and non-nostalgic individuals will report affective, attitudinal and behavioral responses consistent with their affective, attitudinal and behavioral responses towards the original brand.

- Hypothesis 2b states that as the degree of change to the brand increases, individuals will begin to reject the changes to the brand, resulting in negative affective responses, attitudes towards the brand and behavioral intentions towards the brand.

- Hypothesis 2c states that the effects of the change to the brand will be moderated by brand nostalgia such that nostalgic individuals will reject lower levels of change than will non-nostalgic individuals.

This study is a 3 (change to the brand: low, moderate, high) x 3 (brand nostalgia: low, moderate, high) between subjects design in which the change to the brand is
manipulated and brand nostalgia is measured. The dependent variables of interest are attitude towards the original brand, updated brand and company, affective response to the change, behavioral intentions and perceived degree of change.

**Independent Variables**

*Change to the Brand.* Change to the brand will be manipulated by creating images of new versions of a single brand. The specific brand will be determined by a pretest to ensure variance in brand nostalgia among the target population. The specific changes to the brand will also be determined by a pretest to identify changes that are perceived as small, moderate, and large by the target population.

*Brand Nostalgia.* Individuals’ brand nostalgia will be measured using the Brand Nostalgia scale developed in Chapter 3 of this dissertation.

**Dependent Variables**

*Attitude Toward the Brand/Company.* Attitudes toward the original brand, the updated brand, and the company will be measured using variations on Shamdasani, Stanaland and Tan’s (2001) attitude measure (see Appendix 1 for all scales).

*Behavioral Intentions.* Behavioral intentions towards the brand will be measured using a scale developed by the author. This scale includes questions to determine the likelihood of purchase and/or consumption of the brand if the opportunity arose. Examples of scale items include, “If presented with the opportunity to use this brand again, I would,” and “I would be very excited if I found/used this brand again.”
Affective Response. Subjects’ affective responses to the updated brand were captured using an adaptation of Watson and Clark’s (1988) Positive and Negative Affect Scale (PANAS).

Perceived Degree of Change. Subjects’ perceived degree of change was measured for two reasons. First, perceived degree of change served as a manipulation check to verify that the manipulated changes to the brand were perceived as small, moderate and large changes by the subjects. More importantly, these items served as a dependent measure to test Hypothesis 1, in which the perceived degree of change is expected to vary between nostalgia clusters. Subjects were asked to answer three questions, using a scale of 1 to 7, with 1 indicating no change and 7 indicating a very large change. Subjects were asked “Compared to brand as you remember it from your childhood, how different do you think manipulation would be?” “Compared to brand as you remember it from your childhood, how big a change do you think manipulation would be?” and “Compared to brand as you remember it from your childhood, how new do you think manipulation would be?”

Control Variables

Nostalgia Proneness. Holbrook’s (1993) Nostalgia Proneness scale was included to control for an individual’s general psychographic tendency towards overall nostalgia, which could influence his or her responses to the changed brand.
Brand Usage. Brand usage was collected to ensure that responses are not influenced by current usage. Subjects were asked to indicate how frequently they consumed the brand as a child and as an adult, as well as how recently the brand had been consumed and purchased.

Familiarity. Familiarity with the brand was collected to ensure that subjects are at least somewhat familiar with the brand, as one who is completely unfamiliar with the brand will be unable to answer many of the questions. This was measured by a single question asking the subject how familiar he or she is with the brand on a seven point scale with one equal to very unfamiliar and seven equal to very familiar.

Pretest 1: Selection of a Focal Brand –

In order to select an appropriate brand to be used in Study 1, a pretest was run to select brands that were not perceived to have changed dramatically over the past few decades. The selection of a brand which has remained relatively unchanged will allow the researcher to control the perceived degrees of change for the brand more closely than if the brand is perceived to have changed significantly in recent years. From the brands generated in the first pretest, a selection of 17 of the most frequently reported brands was tested for attitude towards the brand and perceived degree of change to allow for final selection of stimuli. A sample of 33 undergraduate marketing students (42% male, 91% between 18-25 years, 97% grew up in the United States) was asked to indicate how different each brand is in its current form compared to how it they remember it from when they were children (1 = Not at All Different /7 = Very Different) as well as their
general attitude towards the brand using the Shamdasani, Stanaland and Tan (2001) measure. General attitude items were presented so that the researcher could select brands that did not show a strong bimodal pattern of attitude towards the brand, thereby minimizing bias that might occur if the subjects held very polarizing views of the brand.

The seventeen brands examined ranged in perceived degree of change from small with Lucky Charms ($\mu=2.55$, $\sigma=1.5$) to large with Nickelodeon ($\mu=6.03$, $\sigma=0.85$). Attitude measures were collected to ensure that the selected brands were those towards which subjects held an overall positive attitude towards the brand to minimize the bias that might have occurred if a brand towards which the population had negative attitudes was selected.

<table>
<thead>
<tr>
<th>Exhibit 9</th>
<th>Perceived Degree of Change to Brands - Undergraduate</th>
<th>Perceived Degree of Change</th>
<th>Attitude Towards the Brand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
<td>$\mu$</td>
</tr>
<tr>
<td>Lucky Charms</td>
<td>1</td>
<td>6</td>
<td>2.55</td>
</tr>
<tr>
<td>Coca-Cola</td>
<td>1</td>
<td>5</td>
<td>2.75</td>
</tr>
<tr>
<td>Back to the Future</td>
<td>1</td>
<td>5</td>
<td>2.75</td>
</tr>
<tr>
<td>Cap'n Crunch</td>
<td>1</td>
<td>7</td>
<td>2.82</td>
</tr>
<tr>
<td>Kraft Mac &amp; Cheese</td>
<td>1</td>
<td>7</td>
<td>3.03</td>
</tr>
<tr>
<td>Pepsi</td>
<td>1</td>
<td>7</td>
<td>3.15</td>
</tr>
<tr>
<td>Crayola Crayons</td>
<td>1</td>
<td>7</td>
<td>3.15</td>
</tr>
<tr>
<td>Converse</td>
<td>1</td>
<td>7</td>
<td>3.36</td>
</tr>
<tr>
<td>Teenage Mutant Ninja Turtles</td>
<td>1</td>
<td>7</td>
<td>3.61</td>
</tr>
<tr>
<td>Lego</td>
<td>1</td>
<td>7</td>
<td>3.72</td>
</tr>
<tr>
<td>Star Wars</td>
<td>1</td>
<td>6</td>
<td>3.79</td>
</tr>
<tr>
<td>Nike</td>
<td>1</td>
<td>7</td>
<td>4.06</td>
</tr>
<tr>
<td>Willie Wonka &amp; the Chocolate Factory</td>
<td>1</td>
<td>7</td>
<td>4.21</td>
</tr>
<tr>
<td>Barbie</td>
<td>1</td>
<td>7</td>
<td>4.73</td>
</tr>
<tr>
<td>Nintendo</td>
<td>1</td>
<td>7</td>
<td>5.00</td>
</tr>
<tr>
<td>Disney</td>
<td>1</td>
<td>7</td>
<td>5.00</td>
</tr>
<tr>
<td>Nickelodeon</td>
<td>4</td>
<td>7</td>
<td>6.03</td>
</tr>
</tbody>
</table>
Lucky Charms cereal was selected as the target brand because the brand had lowest perceived degree of change from the product available when individuals in the target population were children and because the general attitude towards Lucky Charms was positive, with the mean response above the midpoint, but not so high as to assume that the vast majority of subjects would have very strong positive attitudes towards the brand, potentially skewing the results.

Pretest 2 - Selection of Change Conditions for the Focal Brand

In order to develop possible changes to make to the brand, 22 undergraduate marketing students (65% male, $\mu = 20.4$ years old, $\sigma = 0.6$ years) were asked to spontaneously generate possible changes that could be made to Lucky Charms cereal and to rate how large each change would be. The suggestions were first examined for feasibility and those which were determined not to be feasible to execute within the scope of the study were eliminated. This examination resulted in a subset of eight items were selected for further testing. A complete list of the suggested changes to the brand can be found in Appendix 5. The eight suggested changes to the brand selected for pretesting were:

- Lucky Charms cereal with 25% less sugar.
- Lucky Charms cereal with twice as many marshmallows.
- Lucky Charms cereal with a new marshmallow shape.
- Lucky Charms cereal with berry flavored oat pieces.
- Lucky Charms cereal with larger marshmallows.
- Lucky Charms cereal with chocolate flavored oat pieces.
• Lucky Charms cereal with cane sugar instead of high fructose corn syrup.
• Organic Lucky Charms cereal.

Pretest 3 – Manipulated Changes to Lucky Charms Cereal

Thirty-three undergraduate marketing students (27% male, $\mu = 22.9$ years old, $\sigma = 3.8$ years) were shown manipulated images of the Lucky Charms Cereal box for each of the eight potential modifications and were asked to rate each modification for perceived degree of change and perceived believability of the change. The results of the perceived degree of change for each of the manipulations are as follows:

<table>
<thead>
<tr>
<th>Proposed Manipulations – Lucky Charms</th>
<th>Mean Perceived Change</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lucky Charms cereal with a new marshmallow shape.</td>
<td>3.14</td>
<td>1.63</td>
</tr>
<tr>
<td>Lucky Charms cereal with cane sugar instead of high fructose corn syrup.</td>
<td>4.11</td>
<td>1.79</td>
</tr>
<tr>
<td>Lucky Charms cereal with 25% less sugar.</td>
<td>4.46</td>
<td>1.30</td>
</tr>
<tr>
<td>Lucky Charms cereal with larger marshmallows.</td>
<td>4.48</td>
<td>1.29</td>
</tr>
<tr>
<td>Lucky Charms cereal with twice as many marshmallows.</td>
<td>4.70</td>
<td>1.42</td>
</tr>
<tr>
<td>Lucky Charms cereal with chocolate flavored oat pieces.</td>
<td>5.92</td>
<td>1.32</td>
</tr>
<tr>
<td>Organic Lucky Charms cereal.</td>
<td>6.01</td>
<td>1.01</td>
</tr>
<tr>
<td>Lucky Charms cereal with berry flavored oat pieces.</td>
<td>6.02</td>
<td>0.91</td>
</tr>
</tbody>
</table>

From this analysis, three stimuli were selected to represent high, moderate and low perceived degrees of change. Lucky Charms with a new marshmallow shape was selected because it had the lowest perceived degree of change, while Lucky Charms with twice as many marshmallows was selected because it was rated as the moderate changes with an acceptable standard deviation. Lucky Charms with chocolate flavored oat pieces was selected as stimuli with the highest degree of change, despite the fact that two other
possible manipulations, Lucky Charms and berry flavored Lucky Charms, had higher perceived levels of change. The decision was made to use chocolate flavored Lucky Charms because the other two manipulations had several responses indicating a low perceived degree of change to the brand. While the overall mean perceived degree of change to chocolate was lower, all students rated the perceived degree of change above the midpoint, indicating more uniformity in perceptions. Subjects were also asked to rate the believability of the changes. For the low change condition, subjects rated the believability of the manipulation at 5.13 out of seven ($\sigma=1.79$) with one indicating the change was completely unbelievable and seven indicating the change was completely believable. For the moderate change condition, the mean response was 5 out of 7 ($\sigma=1.58$) and for the large change condition, the mean response was 4.50 out of 7 ($\sigma=1.78$). The differences in the believability of the changes was expected and, as all were at or above the midpoint for believability, were found to be acceptable.

Paired t-tests revealed that perceived degree of change scores were significantly different between the low and moderate change conditions ($t (32) = -4.29$, $p<0.001$), between the low and high change conditions ($t (32) = -7.79$, $p<0.001$) and between the moderate and high change conditions ($t (32) = -5.15$, $p<0.001$).

**Procedure** –

Using an online survey site and in exchange for extra credit, a sample of student subjects participated in a two-part survey. In the first part of the survey, subjects were asked questions to determine their level of familiarity with the un-manipulated stimuli, an
image of a box of Lucky Charms cereal as it appears today (See Appendix 6), and the frequency of their consumption of the product as a child and as an adult. Subjects were then given the Attitude Towards the Original Brand scale using an adaptation of the Shamdasani, Stanaland and Tan (2001) measure. Following the Attitude items, subjects were given the Brand Nostalgia scale developed and validated in Chapter 3 followed by the Nostalgia Proneness scale (Holbrook 1993).

A two-step cluster analysis was run on subject responses to the Brand Nostalgia scale and the returned clusters were used to block the sample by randomly assigning members from each cluster into small, moderate or large degree of change conditions so that there was a representative sample of nostalgic subjects in each manipulated condition.

After a delay of one week, subjects were sent a link to a survey containing the same image of the cereal box as was used in the pretest for their manipulated condition, a box labeled “New Hourglass Marshmallow Shape” for the small change condition, a box labeled “Now with Twice the Marshmallows” for the moderate change condition and “New! Chocolate Lucky Charms” for the large change condition. (See Appendix 6 for images). Subjects were asked to imagine that this “new” version of the cereal will replace the current versions available and that the manipulated version will be the only version available going forward. After exposure to the manipulated stimuli, subjects were asked to report their attitude towards the updated brand and the company that produces the cereal using the same scale shown in Appendix 1 but adjusted for the appropriate context (Shamdasani, Stanaland and Tan 2001). Subjects were then given the Behavioral Intention scale (see Appendix 1) and the Affective Response scale (see Appendix 1).
Subjects were then asked the manipulation check questions found in Appendix 1 to ensure that the subjects perceived the manipulated changes made to the brand to be consistent with the change condition. Finally, demographic information including age, home country and gender were collected.

**Results –**

A sample of 297 undergraduate students (39% male, μ =22.5 years old, σ = 4.1 years) participated in the study in exchange for extra credit. Of the 233 subjects who answered the consumption questions, 44 reported having never purchased and 16 reported having never consumed Lucky Charms cereal despite their low familiarity with the brand, the subjects were retained as representative of the population. Seventy-eight subjects reported having eaten Lucky Charms cereal within the past month and another 48 reported having eaten the cereal in the past year, suggesting that more than half of the population consumes Lucky Charms cereal with some degree of frequency. Two hundred and fifty subjects grew up in the United States with the majority of the remaining students raised in China.

**Reliability of Measured Variables**

*Attitude Towards the Original Brand.* The Attitude Towards the Original Brand scale was found to have a Cronbach’s alpha of 0.97 across the seven items. A composite score was created for each individual by averaging the individual’s responses to all seven items; subject responses ranged from a score of 1, indicating a very negative attitude towards the original brand, to a score of 7, indicating a very positive attitude towards the
original brand. The mean response across all 297 subjects was 5.61 with a standard deviation of 1.38.

**Attitude Towards the Updated Brand.** The Cronbach’s alpha for this scale was found to be the same high value at 0.97 across the 7 items. Participants’ scores on the items were again averaged to create a composite score. The composite responses ranged between a score of 1 to a score of 7. The mean response for this scale was 4.92 with a standard deviation of 1.60.

**Attitude Towards the Company.** Once again, the Cronbach’s alpha for this scale was found to be well above acceptable levels at 0.98 across the 7 items. Composite scores were created and responses ranged between 1 and 7. The mean response for this scale was 5.14 with a standard deviation of 1.38.

**Behavioral Intentions.** The Cronbach’s alpha for the Behavioral Intentions scale was again acceptable at 0.96 across the 5 items with a range of responses varying from 1 to 7. Composite scores showed a mean response score of 4.49 with a standard deviation of 1.73.

**Affective Response.** The Cronbach’s alpha for the Affective Response scale was found to be 0.96 across the 7 items. The reported ranges for this variable were from 1 to 7 while the mean response of the composite score was 4.29 with a standard deviation of 1.56.
**Brand Nostalgia.** The Cronbach’s alpha of the Brand Nostalgia scale was found to be 0.96 across the 7 items. As with the previous scales, a composite score was created by averaging the responses. Responses ranged from 1 to 7. The reported mean of the composite scale was 4.29 with a standard deviation of 1.63. The responses to this scale (not the composite responses) were used to divide subjects into clusters via a Two-Step Cluster analysis.

**Nostalgia Proneness.** The Cronbach’s alpha for the Nostalgia Proneness scale was found to be low at 0.61, although this value is not unexpected as half of the items in this scale are reverse scored. Further, the alpha for this scale is not unprecedented. In the original paper in which the scale was developed, the alpha value was reported to be below the generally accepted 0.80 level. The response range for this variable was from 1 to 6.63. The reported mean of the averaged composite scale was 4.63 with a standard deviation of 0.87.

**Manipulation Check**

The Cronbach’s alpha for the three manipulation check items was found to be 0.91. The reported range for this variable was between 1 and 7 while the mean averaged composite score was 4.16 with a standard deviation of 1.69. A one-way ANOVA on perceived degree of change by change condition was found to be significant ($F(2, 296)=57.25$, $p<0.001$). A post hoc Tukey analysis was run across groups to ensure that the manipulations were statistically significantly different from each other. For the low
change condition, the reported mean was 3.19 with a standard deviation of 1.61. For the moderate change condition, the reported mean was 4.03 with a standard deviation of 1.42 while for the high change condition, the reported mean was 5.36 with a standard deviation of 1.25. In each case, the manipulations were statistically significantly different from each other at $p<0.001$.

**Cluster Analysis**

In order to minimize the effects of attrition across the two parts of the study, a Two-Step cluster analysis was re-run on the Brand Nostalgia scale items. The cluster analysis revealed three distinct clusters with different patterns of responses. The low nostalgia cluster consisted of 58 individuals (48.3% male, mean age = 23.07, $\sigma=5.53$, age range 19 to 45-years old). The mean brand nostalgia score for this cluster was 1.84 with a standard deviation of 0.62, and composite scores ranged from 1.84 to 2.86 on a seven-point scale. The moderate nostalgia cluster was significantly larger than the low nostalgia cluster, with 106 individuals (42.5% male, mean age = 22.04, $\sigma=4.20$, age range 19 to 47-years-old). The mean Brand Nostalgia composite score for the moderately nostalgic cluster was 3.95 with a standard deviation of 0.49. Composite scores for this cluster ranged from 2.86 to 4.86 out of 7. Finally, the highly nostalgic cluster was comprised of 117 individuals (31.9% male, mean age = 21.72, $\sigma=3.13$, age range 19 to 37 years old). Subjects in the highly nostalgic cluster had a reported mean Brand Nostalgia composite score of 5.87 with a standard deviation of 0.63. The range of scores for this cluster was between 4.86 and 7. The three clusters were subsequently used to test Hypotheses 1 and 2.
**Attitude Towards the Original Brand.** As a check of the brand nostalgia clusters, a 3 (change: low, moderate, high) x 3 (brand nostalgia: low, moderate, high) ANOVA was run with the Attitude Towards the Brand composite measure as the dependent variable. The analysis returned a significant main effect of brand nostalgia ($F(2, 280) = 84.50$, $p < 0.001$). A post hoc Tukey test revealed that individuals with high brand nostalgia reported more positive levels of attitude towards the original brand ($\mu = 6.54$, $\sigma = 0.69$) than did individuals in the moderate nostalgia cluster ($\mu = 5.41$, $\sigma = 1.18$) or individuals in the low nostalgia cluster ($\mu = 4.34$, $\sigma = 1.43$). No significant main effect of change condition was found ($F(2, 280) = 0.676$, $p = 0.51$) nor was a significant interaction effect found ($F(4, 280) = 0.777$, $p = 0.541$). This suggests that individuals were accurately assigned to clusters, as it is expected that those who are highly brand nostalgic will report more positive attitude towards the original brand than do their less nostalgic counterparts.
Hypothesis Tests

In order to test the first hypothesis, that brand nostalgic individuals will perceive a larger degree of change to their brand than will non-brand nostalgic individuals, a one-way ANOVA was run using the perceived degree of change as the dependent variable and the brand nostalgia cluster as the factor. Using the clusters previously described, one-way ANOVAs were run for each change condition. The ANOVA returned a significant effect of brand nostalgia cluster on perceived degree of change ($F(2, 280) = 4.23, p=0.016$). Individuals in the low brand nostalgia cluster reported an average perceived degree of change of 3.70 with a standard deviation of 1.74 while individuals in the high brand nostalgia cluster reported a perceived average degree of change of 4.47 with a standard
deviation of 1.80. \( (p=0.012) \). The ANOVA did not return statistically significant differences between the responses for individuals in the moderate change condition \( (\mu=4.11, \sigma=1.50) \) when compared to individuals in the low brand nostalgia cluster \( (p=0.282) \) or those in the high brand nostalgia cluster \( (p=0.275) \).

To test Hypothesis 2, a MANCOVA was run with change condition as the independent variable and dependent variables attitude towards the updated brand, attitude towards the company and affective response to the changes, using brand nostalgia as a covariate, to verify significant main effects on the variables. The MANCOVA revealed significant main effects for all dependent variables, all at the \( p<0.001 \) level as shown in the exhibit below.

<table>
<thead>
<tr>
<th>Exhibit 12</th>
<th>Variable</th>
<th>F-Statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attitude Towards the Updated Brand</td>
<td>15.283</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Attitude Towards the Company</td>
<td>12.884</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Affective Response</td>
<td>34.042</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Behavioral Intentions</td>
<td>15.476</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

In order to test Hypothesis 2, a 3 (change: low, moderate, high) x 3 (brand nostalgia: low, moderate, high) analysis of variance was run for each of the dependent variables: attitude towards the updated brand, attitude towards the company, behavioral intentions and affective response to the change. Covariates were not used in testing these hypotheses.
*Attitude Towards the Changed Brand.* An ANOVA was again run for the same 3x3 factors, this time with Attitude Towards the Changed Brand as the dependent variable. The analysis returned significant main effects of brand nostalgia ($F(2, 280) = 9.50$, $p<0.001$) and change condition ($F(2, 280) = 14.02$, $p<0.001$) and a significant interaction effect between the two ($F(4, 280) = 3.84$, $p=0.005$).

A Tukey post-hoc analysis across nostalgia clusters revealed statistically significant differences between the low change condition ($\mu=5.31$, $\sigma=1.32$) and the high change condition ($\mu=4.15$, $\sigma=1.72$) where $p<0.001$. The analysis further returned a statistically significant difference between the moderate change condition ($\mu=5.24$, $\sigma$
=1.55) and the high change condition ($\mu=4.15, \sigma=1.72$) at the $p<0.001$ level. There was no statistically significant difference between the reported responses to the low and moderate change conditions.

A Tukey post-hoc analysis was then run within each brand nostalgia cluster. Within the low brand nostalgia cluster, the analysis indicates no significant main effect of change condition on attitude towards the updated brand ($F(2, 57) = 1.58, p=0.215$). Accordingly, there are no significant differences between the three change conditions: high change ($\mu=4.02, \sigma=1.32$), moderate change ($\mu=4.16, \sigma=1.72$) and low change ($\mu=4.85, \sigma=1.21$).

Within the moderate brand nostalgia cluster, we once again find a significant main effect of change condition ($F(2, 105) = 4.20, p=0.018$). In this case, there is a statistically significant difference between the high change condition ($\mu=4.28, \sigma=1.81$) and the moderate change condition ($\mu=5.32, \sigma=1.33$) at the $p=0.013$ level. There is no statistically significant difference between the high change condition and the low change condition ($\mu=4.82, \sigma=1.23$) where $p=0.275$ or between the low and moderate change conditions ($p=0.300$).

Finally, for the high brand nostalgia cluster, a significant main effect of change condition was found ($F(2, 116) = 22.49, p<0.001$). The reported attitude towards the changed brand was significantly lower for highly brand nostalgic individuals in the high change condition ($\mu=4.01, \sigma=1.82$) when compared to individual in the moderate change condition ($\mu=5.99, \sigma=1.56$) and individuals in the low change condition ($\mu=5.93, \sigma=1.18$) all at the $p<0.001$ level. The difference between the moderate and low change conditions was not significant ($p=0.983$).
As the degree of change to the brand increased, individual’s in the high brand nostalgia cluster demonstrated a more severe drop in attitude towards the updated brand between the moderate and high change conditions than did individuals in the moderate or low brand nostalgia clusters. While these findings do not fully support Hypothesis 2c, they do show clear evidence of the moderating effect of brand nostalgia.

**Attitude Towards the Company.** Once again, a 3 (change: low, moderate, high) x 3 (brand nostalgia: low, moderate, high) ANOVA was run, this time with Attitude Towards the Company as the dependent variable. The ANOVA revealed statistically significant differences between the brand nostalgia groups ($F(2, 280)=7.84, p<0.001$) and the change condition ($F(2, 280)=10.77, p<0.001$) as well as a significant interaction effect ($F(4, 280)=4.22, p=0.002$). A Tukey post-hoc analysis across nostalgia clusters revealed statistically significant differences between the low change condition ($\mu=5.48, \sigma=1.19$) and the high change condition ($\mu=4.58, \sigma=1.45$) where $p<0.001$. The analysis further revealed a statistically significant difference between the moderate change condition ($\mu=5.37, \sigma=1.36$) and the high change condition ($\mu=4.58, \sigma=1.45$) at the $p<0.001$ level. There was no statistically significant difference between the reported responses to the low and moderate change conditions.
An analysis was then run to look for patterns in responses within brand nostalgia clusters. Within the high brand nostalgia cluster, a significant main effect of change condition was found ($F(2, 116) = 20.00, p<0.001$). For individuals in the high brand nostalgia cluster, those in the high change condition reported significantly lower attitude towards the company ($\mu=4.47, \sigma=1.63$) than did their counterparts in the moderate change condition ($\mu=6.00, \sigma=1.07$) and those in the low change condition ($\mu=6.05, \sigma=1.00$) both at the $p<0.001$ level. There was no statistically significant difference between highly brand nostalgic individuals in the moderate and low change conditions ($p=0.987$).
In the moderate brand nostalgia cluster, a slightly different pattern was found. In this cluster, the main effect of condition on subject response was only marginally significant \((F(2, 105) = 2.55, p=0.083)\). In this cluster, individuals in the high change condition reported a slightly lower attitude towards the company \((\mu=4.69, \sigma=1.40)\) than did individuals in the moderate change condition \((\mu=5.40, \sigma=1.27)\) where \(p=0.067\).

There was no statistically significant difference between individuals in the high and low change condition \((\mu=5.01, \sigma=1.22), p=0.542\) nor was there a statistically significant difference between individuals in the moderate and low change conditions \((p=0.396)\).

Finally, for the low brand nostalgia cluster, once again no significant main effect of change is found \((F(2, 57) = 1.77, p=0.181)\). As is expected, there are no significant differences between those in the high change condition \((\mu=4.52, \sigma=1.11)\) the moderate change condition \((\mu=4.51, \sigma=1.42)\) and the low change condition \((\mu=5.18, \sigma=0.989)\).

This supports Hypothesis 2a such that individuals reported more positive attitude towards the company when the change to the brand was perceived as being smaller. Further, as stated in Hypothesis 2b, as the change to the brand increased, attitude towards the company was reported as more negative. While an interaction effect was found showing clear evidence of the moderating effect of brand nostalgia on attitude towards the company, these findings do not fully support Hypothesis 2c.

**Behavioral Intentions.** An additional 3 (change: low, moderate, high) x 3 (brand nostalgia: low, moderate, high) ANOVA was run, this time examining Behavioral Intentions as the dependent variable. The analysis revealed a significant main effect of brand nostalgia cluster \((F(2, 280) = 9.55, p<0.001,\) a significant main effect of change
condition \((F(2, 280)=21.42, p<0.001)\), and a significant interaction effect \((F(4, 280) = 5.79, p<0.001)\). Response patterns mirrored those found for the previous dependent variables. A Tukey post-hoc analysis across nostalgia clusters revealed statistically significant differences between the low change condition \((\mu=4.83, \sigma =1.50)\) and the high change condition \((\mu=3.80, \sigma =1.83)\) where \(p<0.001\). The analysis further revealed a statistically significant difference between the moderate change condition \((\mu=4.78, \sigma =1.66)\) and the high change condition \((\mu=3.80, \sigma =1.83)\) at the \(p<0.001\) level. There was no statistically significant difference between the reported responses to the low and moderate change conditions. These findings support Hypothesis 2b, which states that individuals in all nostalgia clusters will report lower levels of behavioral intentions as the change to the brand increases.

Exhibit 15
When looking within clusters, a similar pattern to those seen with prior dependent variables emerged. Within the high brand nostalgia cluster, a significant main effect of change condition is found \((F(2, 116) = 27.34, p<0.001)\). Individuals in the high change condition reported significantly lower behavioral intentions towards the brand \((\mu=3.71, \sigma=1.93)\) than did individuals in the moderate change condition \((\mu=5.86, \sigma=1.20)\) and individuals in the low change condition \((\mu=5.72, \sigma=1.02)\), both where \(p<0.001\). There was no significant difference between individuals in the moderate and low change conditions, as \(p=0.923\).

For individuals in the moderate brand nostalgia cluster, a marginally significant main effect of change condition was found \((F(2, 105) = 2.82, p=0.064)\). Within this brand nostalgia cluster, individuals in the high change condition \((\mu=4.08, \sigma=1.85)\) reported marginally significant differences from those in the moderate change condition \((\mu=4.94, \sigma=1.23)\) where \(p=0.063\), but did not report significant differences from those in the low change condition \((\mu=4.33, \sigma=1.44)\). Further, there were no significant differences reported between individuals in the low and moderate change conditions.

For individuals in the low brand nostalgia condition, no significant main effect of change condition was found \((F(2, 57) = 0.101, p=0.904)\). There were no significant differences in behavioral intentions between individuals in the high change condition \((\mu=3.48, \sigma=1.50)\) the moderate change condition \((\mu=3.39, \sigma=1.71)\) or the low change condition \((\mu=3.62, \sigma=1.64)\). This supports Hypothesis 2a such that individuals reported more positive behavioral intentions when the change to the brand was perceived as being smaller. Further, as stated in Hypothesis 2b, as the change to the brand increased, behavioral intentions were reported as more negative. While an interaction effect was
found showing clear evidence of the moderating effect of brand nostalgia on behavioral intentions, these findings do not fully support Hypothesis 2c.

**Affective Response.** A final 3 (change: low, moderate, high) x 3 (brand nostalgia: low, moderate, high) ANOVA was run with Affective Response to the Change as the dependent variable and nostalgia cluster and change condition as the independent variables. A statistically significant effect of nostalgia cluster ($F(2, 280)=12.30$, $p<0.001$) and change condition ($F(2,280)=19.74$, $p<0.001$) and a significant interaction between the two ($F(4,280)=8.07$, $p<0.001$) were found.

Exhibit 16
A Tukey post-hoc analysis across nostalgia clusters revealed statistically significant differences between the low change condition ($\mu=4.60$, $\sigma=1.19$) and the high change condition ($\mu=3.44$, $\sigma=1.63$) where $p<0.001$. The analysis further revealed a statistically significant difference between the moderate change condition ($\mu=4.81$, $\sigma=1.52$) and the high change condition ($\mu=3.44$, $\sigma=1.63$) at the $p<0.001$ level. There was no statistically significant difference between the reported responses to the low and moderate change conditions. These findings support the Hypothesis 2b which states that as individuals in all nostalgia clusters will report lower levels of affective response to the change in the brand as the change to the brand increases.

When looking across brand nostalgia clusters, a similar pattern of response is once again found. For individuals in the high brand nostalgia cluster, a significant main effect of change condition is found ($F(2, 116) = 41.41, p<0.001$). Individuals in the high change condition ($\mu=3.11$, $\sigma=1.58$) reported significantly lower affective responses towards the change than did individuals in the moderate change condition ($\mu=5.65$, $\sigma=1.26$) and individuals in the low change condition ($\mu=5.23$, $\sigma=1.08$) both where $p<0.001$. There was no statistically significant difference between highly brand nostalgic individuals in the low and moderate change condition ($p=0.368$).

For individuals in the moderate brand nostalgia cluster, again there is evidence of a statistically significant main effect of change condition ($F(2, 105) = 5.69, p=0.005$). Once again, individuals in the high change condition ($\mu=3.77$, $\sigma=1.80$) report significantly lower affect towards the change than do individuals in the moderate change condition ($\mu=4.90$, $\sigma=1.27$) where $p=0.003$. However, individuals in the moderate brand nostalgia cluster do not report statistically significant differences between individuals in
the low change condition ($\mu=4.27, \sigma=1.03$) and those in either of the other two change conditions.

Finally, for individuals in the low brand nostalgia cluster, no significant effect of change condition is found ($F(2, 57) = 0.645, p=0.528$) and, resultantly, no differences between the high change condition ($\mu=3.45, \sigma=1.34$) the moderate change condition ($\mu=3.45, \sigma=1.25$) and the low change condition ($\mu=3.86, \sigma=1.12$) were found. This supports Hypothesis 2a such that individuals reported more positive affective responses when the change to the brand was perceived as being smaller. Further, as stated in Hypothesis 2b, as the change to the brand increased, affective responses were reported as more negative. While an interaction effect was found showing clear evidence of the moderating effect of brand nostalgia on affective response to the change, these findings do not fully support Hypothesis 2c.

**Discussion**

The findings in this study support the hypothesized effects of this dissertation, namely that an individual’s brand nostalgia will moderate their response towards change in a brand. The results suggest that individuals who have high levels of brand nostalgia will respond positively to small or moderate changes to their brand, even though they are more aware of the changes than their less nostalgic counterparts. However, once the change to the brand crosses a threshold, highly brand nostalgic individuals will respond more negatively towards the change than will individuals with lower levels of brand nostalgia. Individuals in the moderate nostalgia cluster report a similar pattern of response as those in the high nostalgia cluster, but their reported attitudes, affect and behavioral intentions are more moderately positive than those in the high brand nostalgia
cluster. As the change to the brand increases, individuals in the moderate brand nostalgia cluster will reject the change but with a less dramatic difference than those in the high brand nostalgia cluster. Individuals in the low brand nostalgia cluster not only report smaller perceived changes to the brand than those in the high change condition, but also seem to be, as a whole, unaffected by the degree of change to the brand. Indeed, in many cases, individuals in the low brand nostalgia cluster do not report statistically significant differences in attitudes, affect and behavioral intentions towards the brand, regardless of brand change condition.

This study provided support for all hypotheses tested, but had some limitations which need to be examined in further studies. First, the use of an undergraduate sample to test the hypotheses limits the real-world applicability of the findings, as the group is fairly homogeneous and, in many cases, not very far removed from the age in which consumption of Lucky Charms was a regular event. The use of a more diverse adult population will increase the overall applicability and validity of the findings. Secondly, as the findings in the first pretest suggest, individuals exhibit brand nostalgia towards a variety of brands across multiple product categories. Study 2 is designed to expand the scope of the research to include brands from multiple product categories and a more heterogeneous sample to expand the applicability even further.
Study 2 – Manipulations to a Single Brand – Adult Sample

The second study in this chapter is designed to test Hypotheses 1 and 2 as well as the boundary effects of Brand Nostalgia to ensure that the findings from Study 1 were not artifacts of the brands selected or the use of an undergraduate sample.

This study is a 3 (change to the brand: low, moderate, high) x 3 (brand nostalgia: low, moderate, high) between subjects design in which the change to the brand is manipulated and brand nostalgia is measured. The dependent variables of interest are attitude towards the original brand, updated brand and company, affective response to the change, behavioral intentions and perceived degree of change.

Independent Variables

Change to the Brand. Change to the brand will be manipulated by creating images of new versions of a single brand. The specific brand will be determined by a pretest to ensure variance in brand nostalgia among the target population. The specific changes to the brand will also be determined by a pretest to identify changes that are perceived as small, moderate and large by the target population.

Brand Nostalgia. Individuals’ brand nostalgia will be measured using the Brand Nostalgia scale developed in Chapter 3 of this dissertation.
Dependent Variables

**Attitude Toward the Brand/Company.** Attitudes toward the original brand, the updated brand, and the company will be measured using variations on Shamdasani, Stanaland and Tan’s (2001) attitude measure (see Appendix 1 for all scales).

**Behavioral Intentions.** Behavioral intentions towards the brand will be measured using a scale developed by the author. This scale includes questions to determine the likelihood of purchase and/or consumption of the brand if the opportunity arose. Examples of scale items include, “If presented with the opportunity to use this brand again, I would,” and “I would be very excited if I found/used this brand again.”

**Affective Response.** Subjects’ affective responses to the updated brand were captured using an adaptation of Watson and Clark’s (1988) Positive and Negative Affect Scale (PANAS).

**Perceived Degree of Change.** The perceived degree of change was measured for two reasons. First, the perceived degree of change served as a manipulation check to verify that the manipulated changes to the brand were perceived as small, moderate and large changes by the subjects. More importantly, these items served as a dependent measure to test Hypothesis 1, in which the perceived degree of change is expected to vary between nostalgia clusters. Subjects were asked to answer three questions, using a scale of 1 to 7, one indicating no change, 7 indicating a very large change. Subjects were asked “Compared to *brand* as you remember it from your childhood, how different do you think
manipulation would be?” “Compared to brand as you remember it from your childhood, how big a change do you think manipulation would be?” and “Compared to brand as you remember it from your childhood, how new do you think manipulation would be?”

Control Variables

Nostalgia Proneness. Holbrook’s (1993) Nostalgia Proneness scale was included to control for an individual’s general psychographic tendency towards overall nostalgia that could influence his or her responses to the changed brand.

Brand Usage. Brand usage was collected to ensure that responses are not influenced by current usage. Subjects were asked to indicate how frequently they consumed the brand as a child and as an adult as well as how recently the brand had been consumed and purchased.

Familiarity. Familiarity with the brand was collected to ensure that subjects are at least somewhat familiar with the brand, as one who is completely unfamiliar with the brand will be unable to answer many of the questions. This was measured by a single question asking the subject how familiar, on a seven point scale, the individual is with the brand.

Pretest 4 – Selection the Focal Brand for Adult Population

As with Study 1, the first step in Study 2 was to identify brands towards which a portion of the adult population will be nostalgic. A sample of 225 adults who grew up in
the United States (91% female, m=36.6 years old, s=11.5 years, range 18-86 years) was obtained through an online social media website. Subjects were asked to spontaneously generate up to 10 brands they are nostalgic for and then to select the one brand towards which they are the most nostalgic. The most frequently generated brands are shown in Exhibit 17 while a full list can be found in Appendix 3.

<table>
<thead>
<tr>
<th>Nostalgic Brand Responses – Adult Sample</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disney</td>
<td>12</td>
</tr>
<tr>
<td>Coca-Cola</td>
<td>8</td>
</tr>
<tr>
<td>Lego</td>
<td>7</td>
</tr>
<tr>
<td>Star Trek</td>
<td>6</td>
</tr>
<tr>
<td>Nintendo</td>
<td>4</td>
</tr>
<tr>
<td>Atari</td>
<td>3</td>
</tr>
<tr>
<td>Heinz Ketchup</td>
<td>3</td>
</tr>
<tr>
<td>Hello Kitty</td>
<td>3</td>
</tr>
<tr>
<td>Quaker Oats</td>
<td>3</td>
</tr>
</tbody>
</table>

As the sample used to collect this data was primarily female, care was taken to ensure that the brands selected for use in Study 3 are not heavily gender biased. Because of this, brands that many individuals reported having brand nostalgia towards were included in the selection of potential stimuli, despite not being identified as a “most brand nostalgic” brand. Three brands were selected for additional testing: Crayola Crayons, a brand that was identified by 6 individuals as being a brand towards which they were nostalgic, Oreo Cookies, identified by 9 individuals, and Mickey Mouse, selected as a representation of the Disney brand, identified by 12 individuals.
Pretest 5 – Selection of Change Conditions for the Focal Brand

In order to develop possible changes that could be made to the brands listed above, 10 undergraduate students (male – 50%, mean age =21.5 years, σ= 2.00) were asked to spontaneously generate possible changes that could be made to Oreos, Crayola Crayons and Mickey Mouse. A complete list of the suggested changes to the brand can be found in Appendix 7. The suggested changes to the brand selected for pretesting were:

- Oreo Cookies
  - Make the cookies oval
  - Make the cookies square
  - Triple the cream filling
  - Remove the cream filling completely

- Mickey Mouse
  - Change Mickey Mouse’s costume to a suit
  - Change Mickey Mouse’s costume to jeans and a jacket
  - Change the color of Mickey Mouse’s costume to be blue

- Crayola Crayon
  - Change the shape of the crayon to be triangular
  - Make the crayons more difficult to melt (resulting in a change in quality)
  - Blunt the ends of the crayons to eliminate the traditional shape
  - Make the crayon wrappers one color, rather than coordinating with the color of the crayon
Pretest 6 – Perceived Change to Existing Brands, Adult Sample

As in Pretest 3, a sample of 26 undergraduate subjects (μ=21.0 years, σ=1.22, 50% male) were shown images and descriptions of potential changes that could be made to three brands, Mickey Mouse, Oreo and Crayola, and were asked to indicate how different each potential change to the brand is, compared to when they were children (1 = Not at All Different /7 = Very Different). Attitude towards the brand was collected using the Shamdasani, Stanaland and Tan (2001) measure. Attitude was measured so that the researchers can select brands with a range of attitudinal responses. Based on the analysis of the data, Mickey Mouse and Oreo cookies were selected as the target brands to be used in this study. For the low change conditions, to represent a small change in the brand from when the participants were younger, images of both Mickey Mouse and Oreo cookies as they appear today were selected. For the moderate change condition, an image of Mickey Mouse in a suit was selected (perceived degree of change=3.56/7, σ =1.74) while for Oreos, an image of the cookie in an oval shape was used (perceived degree of change=4.51/7, σ =1.95). For the high change conditions, Mickey Mouse was depicted wearing jeans and a t-shirt (perceived degree of change=5.93/7, σ =1.20) and Oreo cookies were square shaped (perceived degree of change=5.72/7, σ =1.42). Images of these changes were used in the actual study and can be seen in Appendix 8. These manipulations have the added benefit of altering the same feature within each brand; for Oreo Cookies the shape of the cookie was manipulated while for Mickey Mouse, his attire was altered.
Procedure –

Using an online survey site and in exchange for $0.50 per response, a sample of approximately 550 adults was recruited using Amazon.com’s MTurk software. Consistent with prior studies, subjects were randomly assigned into one of the three change conditions for each brand so that each individual saw one manipulation for Oreo Cookies and one manipulation for Mickey Mouse. Through the use of Qualtrics survey software, the order in which the subjects were shown the manipulated brands was randomized to eliminate order effects. Subjects were first asked their attitude towards the original brand using an adaptation of the Shamdasani, Stanaland and Tan (2001) scale and were then shown images of the manipulated stimuli. Subjects were asked to imagine that this “new” version of the brand will replace the current versions available and that the manipulated version will be the only version available going forward. After exposure to the manipulated stimuli, subjects were asked to report their attitude towards the updated brand and the company that produces the product using the same scale shown in Appendix 1 but adjusted for the appropriate context (Shamdasani, Stanaland and Tan 2001). Subjects were then given the Behavioral Intentions scale (see Appendix 1) and the Affective Response scale (see Appendix 1). Subjects were then asked the manipulation check questions found in Appendix 1 to ensure that the subjects perceived the manipulated changes made to the brand to be consistent with the change condition. Finally, demographic information including age, home country and gender were collected.
Results –

Removal of subjects who did not grow up in the United States of America resulted in a sample of 519 (42.6% male, $\mu = 35.90$ years old, $\sigma = 12.76$, age range = 18-73).

Reliability of Measured Variables – Oreo Cookies

Attitude Towards the Original Brand. The Attitude Towards the Original Brand scale was found to have a Cronbach’s alpha of 0.97 across the seven items. A composite score was created for each individual by averaging the individual’s responses to all seven items; subject responses ranged from a score of 1, indicating a very negative attitude towards the original brand, to a score of 7, indicating a very positive attitude towards the original brand. The mean response across all 519 subjects was 6.24 with a standard deviation of 1.06.

Attitude Towards the Updated Brand. The Cronbach’s alpha for this scale was found to be the same high value at 0.97 across the 7 items. Participants’ scores on the items were again averaged to create a composite score. The composite responses ranged between a score of 1 to a score of 7. The mean response for this scale was 5.05 with a standard deviation of 1.60.

Attitude Towards the Company. Once again, the Cronbach’s alpha for this scale was found to be well above acceptable levels at 0.98 across the 7 items. Composite scores were created and responses ranged between 1 and 7. The mean response for this scale was 5.05 with a standard deviation of 1.58.
Behavioral Intentions. The Cronbach’s alpha for the Behavioral Intentions scale was again acceptable at 0.95 across the 5 items with a range of responses varying from 1 to 7. Composite scores showed a mean response score of 4.49 with a standard deviation of 1.63.

Affective Response. The Cronbach’s alpha for the Affective Response scale was found to be 0.91 across the 7 items. The reported ranges for this variable were from 1 to 7 while the mean response of the composite score was 3.98 with a standard deviation of 1.23.

Brand Nostalgia. The Cronbach’s alpha of the Brand Nostalgia scale was found to be 0.94 across the 7 items. As with the previous scales, a composite score was created by averaging the responses. Responses ranged from 1 to 7. The reported mean of the composite scale was 4.97 with a standard deviation of 1.39. The responses to this scale (not the composite responses) were used to divide subjects into clusters via a Two-Step Cluster analysis.

Manipulation Check. The Cronbach’s alpha for the manipulation check was found to be 0.91 across the three items. The reported ranges for this variable were between 1 and 7 while the mean averaged composite score was 4.24 with a standard deviation of 1.83. A one-way ANOVA on perceived degree of change by change condition was found to be significant ($F(2, 518)=77.24, p<0.001$). A post hoc Tukey analysis was run across
groups to ensure that the manipulations were statistically significantly different from each other. For the low change condition, the reported mean was 3.24 with a standard deviation of 1.75. For the moderate change condition, the reported mean was 4.10 with a standard deviation of 1.69 while for the high change condition, the reported mean was 5.38 with a standard deviation of 1.36. In each case, the manipulations were statistically significantly different from each other, all where $p<0.001$.

Reliability of Measured Variables – Mickey Mouse

Attitude Towards the Original Brand. The Attitude Towards the Original Brand scale was found to have a Cronbach’s alpha of 0.98 across the seven items. A composite score was created for each individual by averaging the individual’s responses to all seven items; subject responses ranged from a score of 1, indicating a very negative attitude towards the original brand, to a score of 7, indicating a very positive attitude towards the original brand. The mean response across all 519 subjects was 6.15 with a standard deviation of 1.13.

Attitude Towards the Updated Brand. The Cronbach’s alpha for this scale was found to be the same high value at 0.98 across the 7 items. Participants’ scores on the items were again averaged to create a composite score. The composite responses ranged between a score of 1 to a score of 7. The mean response for this scale was 4.74 with a standard deviation of 1.82.

Attitude Towards the Company. Once again, the Cronbach’s alpha for this scale was found to be well above acceptable levels at 0.99 across the 7 items. Composite scores
were created and responses ranged between 1 and 7. The mean response for this scale was 4.80 with a standard deviation of 1.80.

**Behavioral Intentions.** The Cronbach’s alpha for the Behavioral Intentions scale was again acceptable at 0.95 across the 5 items with a range of responses varying from 1 to 7. Composite scores showed a mean response score of 4.02 with a standard deviation of 1.78.

**Affective Response.** The Cronbach’s alpha for the Affective Response scale was found to be 0.91 across the 7 items. The reported ranges for this variable were from 1 to 7 while the mean response of the composite score was 3.72 with a standard deviation of 1.32.

**Brand Nostalgia.** The Cronbach’s alpha of the Brand Nostalgia scale was found to be 0.95 across the seven items. As with the previous scales, a composite score was created by averaging the responses. Responses ranged from 1 to 7. The reported mean of the composite scale was 4.84 with a standard deviation of 1.46. The responses to this scale (not the composite responses) were used to divide subjects into clusters via a Two-Step Cluster analysis.

**Manipulation Check.** The Cronbach’s alpha for the manipulation check was found to be 0.91 across the three items. The reported ranges for this variable were between 1 and 7 while the mean averaged composite score was 4.09 with a standard deviation of 1.79. A
one-way ANOVA on perceived degree of change by change condition was found to be significant ($F(2, 518)=104.23, p<0.001$). A post hoc Tukey analysis was run across groups to ensure that the manipulations were statistically significantly different from each other. For the low change condition, the reported mean was 2.86 with a standard deviation of 1.55. For the moderate change condition, the reported mean was 4.11 with a standard deviation of 1.56 while for the high change condition, the reported mean was 5.22 with a standard deviation of 1.42. In each case, the manipulations were statistically significantly different from each other, all where $p<0.001$.

**Nostalgia Proneness.** The Cronbach’s alpha for the Nostalgia Proneness scale was found to be within acceptable ranges at 0.80. The range for this variable was from 1.38 to 7.00. The reported mean of the averaged composite scale was 4.19 with a standard deviation of 0.95.

**Cluster Analysis - Oreo**

A Two-step cluster analysis on the Brand Nostalgia measure revealed two distinct clusters with different patterns of responses. The low nostalgia cluster was similar in size to the low nostalgia cluster, with 277 individuals (43.9% male, mean age $= 36.23$, $\sigma=12.93$, age range 18 to 73-years-old). The mean Brand Nostalgia composite score for the low nostalgic cluster was 3.90 with a standard deviation of 0.99. Composite scores for this cluster ranged from 1 to 5.14 out of 7. The two clusters were subsequently used to test Hypotheses 1 and 2. The high nostalgia cluster consisted of 263 individuals (39.3% male, mean age $= 34.74$, $\sigma=12.37$, age range 18 to 69-years old). The mean
brand nostalgia score for this cluster was 6.13 with a standard deviation of 0.62, and composite scores ranged from 5.14 to 7 on a seven-point scale.

**Attitude Towards the Original Brand.** As a check of the brand nostalgia clusters, a 3 (change: low, moderate, high) x 2 (brand nostalgia: low, high) ANOVA was run with the Attitude Towards the Brand composite measure as the dependent variable. The analysis returned a significant main effect of brand nostalgia \((F(1, 543) = 124.23, p <0.001)\). A post hoc Tukey test revealed that individuals with high brand nostalgia reported more positive levels of attitude towards the original brand \((\mu=6.71, \sigma=0.49)\) than did individuals in the low nostalgia cluster \((\mu=5.79, \sigma=1.24)\). No significant main effect of change condition was found \((F(2, 543) = 1.11, p=0.33)\). This suggests that individuals were accurately assigned to clusters, as it is expected that those who are highly brand nostalgic will report more positive attitude towards the original brand than do their less nostalgic counterparts.
Cluster Analysis – Mickey Mouse

A Two-step cluster analysis on the Brand Nostalgia measure revealed three distinct clusters with different patterns of responses. The low nostalgia cluster was comprised of 66 individuals (61.5% male, mean age = 35.95, σ=12.81, age range 18 to 63-years-old). The mean Brand Nostalgia composite score for the low nostalgic cluster was 2.10 with a standard deviation of 0.55. Composite scores for this cluster ranged from 1 to 3.14 out of 7. The moderate nostalgia cluster consisted of 239 individuals (45.3% male, mean age = 34.48, σ=12.88, age range 18 to 73-years old). The mean brand nostalgia score for this cluster was 4.28 with a standard deviation of 0.56, and composite scores ranged from 2.71 to 5.29 on a seven-point scale.
The high nostalgia cluster consisted of 237 individuals (32.5% male, mean age = 36.51, \( \sigma = 12.2256 \), age range 18 to 68-years old). The mean brand nostalgia score for this cluster was 6.16 with a standard deviation of 0.58, and composite scores ranged from 5.29 to 7 on a seven-point scale. The three clusters were subsequently used to test Hypotheses 1 and 2.

**Attitude Towards the Original Brand.** As a check of the brand nostalgia clusters, a 3 (change: low, moderate, high) x 3 (brand nostalgia: low, moderate, high) ANOVA was run with the Attitude Towards the Brand composite measure as the dependent variable. The analysis returned a significant main effect of brand nostalgia (\( F(2, 548) = 105.61, p < 0.001 \)). A post hoc Tukey test revealed that individuals with high brand nostalgia reported more positive levels of attitude towards the original brand (\( \mu = 6.71, \sigma = 0.55 \)) than did individuals in the moderate nostalgia cluster (\( \mu = 5.95, \sigma = 1.11 \)) or individuals in the low nostalgia cluster (\( \mu = 4.90, \sigma = 1.46 \)). No significant main effect of change condition was found (\( F(2, 548) = 0.891, p = 0.41 \)). This suggests that individuals were accurately assigned to clusters, as it is expected that those who are highly brand nostalgic will report more positive attitude towards the original brand than do their less nostalgic counterparts.
**Hypothesis Tests**

In order to test the first hypothesis, that brand nostalgic individuals will perceive a larger degree of change to their brand than will non-brand nostalgic individuals, a one-way ANOVA was run using the perceived degree of change as the dependent variable and the brand nostalgia cluster as the factor. Using the clusters previously described, one-way ANOVAs were run for each brand. For the Oreo Cookie stimuli, the ANOVA returned a significant effect of cluster on perceived degree of change ($F(1, 543) = 4.32$, $p=0.038$). Individuals in the low brand nostalgia cluster reported an average perceived degree of change of 4.09 with a standard deviation of 1.67, while individuals in the high brand nostalgia cluster reported a perceived average degree of change of 4.41 with a standard
deviation of 1.97. These findings support the first hypothesis, suggesting that individuals in the high brand nostalgia cluster will perceive a greater degree of change to the brand than will individuals in the low brand nostalgia cluster.

A one-way ANOVA was then run for the Mickey Mouse brand, using the three clusters identified and the reported perceived degree of change for that brand. Once again, the analysis returned a significant effect of brand nostalgia on perceived degree of change \( (F(2, 548) = 3.38, p=0.022) \). Individuals in the high brand nostalgia cluster reported a mean perceived degree of change of 4.20 out of 7 with a standard deviation of 1.77, which was significantly higher than the reported perceived degree of change for individuals in the low brand nostalgia cluster \( (\mu=3.54, \sigma=1.95) \) where \( p=0.040 \) but is not significantly different than the reported perceived degree of change of 4.13 with a standard deviation of 1.75 \( (p=0.920) \). The mean response for individuals in the moderate brand nostalgia cluster was found to be significantly different in perceived degree of change when compared to individuals in the low change condition \( (p=0.040) \). Once again, these findings provide partial support Hypothesis 1 such that individuals in the high brand nostalgia condition once again reported a higher perceived degree of change than individuals in the low nostalgia cluster. This is reinforced by the reported differences in perceived degree of change between individuals in the moderate and low brand nostalgia clusters.
**Hypothesis 2 Tests - Mickey Mouse**

To test Hypothesis 2, that an individual’s brand nostalgia moderates his/her response to changes in the brand, an MANCOVA was run with the Mickey Mouse change condition as the independent variable and attitude towards the updated brand, attitude towards the company, affective response to the change and behavioral intentions using brand nostalgia as a covariate. The MANCOVA returned significant main effects of nostalgia cluster on all four of the main dependent variables as seen below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>F-Statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Towards the Updated Brand</td>
<td>67.39</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Attitude Towards the Company</td>
<td>75.72</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Affective Response</td>
<td>76.94</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Behavioral Intentions</td>
<td>138.86</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Following the confirmation of significant main effects, a series of 3x3 ANOVAs are run to better test Hypothesis 2. Covariates were not used in testing these hypotheses.

**Attitude Towards the Updated Brand.** A 3 (change: low, moderate, high) x 3 (brand nostalgia: low, moderate, high) ANOVA was run with the attitude towards the updated brand composite measure as the dependent variable. Statistically significant main effects of brand nostalgia cluster ($F(2, 548) = 35.68, p<0.001$) and change condition ($F(2, 548) = 19.79, p<0.001$) were found but as well as a marginally significant interaction effect ($F(4, 548) = 2.08, p=0.083$).
A Tukey post hoc analysis across nostalgia clusters revealed statistically significant differences between the low change condition (μ=5.32, σ =1.55) and the high change condition (μ=3.94, σ =1.90) where p<0.001 but did not show a significant difference between the low and moderate change conditions (μ=4.99, σ =1.70, p=0.13). The analysis further returned a statistically significant difference between the moderate change condition and the high change condition at the p<0.001 level.

An analysis was then run to look for patterns in responses within brand nostalgia clusters. Within the low brand nostalgia cluster, no statistically significant main effect of change condition was found (F(2, 70) = 1.58, p=0.213) and, as such, there was no statistically significant difference between individual responses in the low change
condition ($\mu=3.90$, $\sigma=1.62$), the moderate change condition ($\mu=3.46$, $\sigma=1.30$) and high change condition ($\mu=3.16$, $\sigma=1.45$).

Within the moderate brand nostalgia cluster, a significant main effect of change condition ($F(2, 233) = 8.68, p<0.001$) was found. Individuals in the low change condition ($\mu=5.96$, $\sigma=1.45$) reported significantly more positive attitude towards the updated brand than those reported by individuals in the high change condition ($\mu=3.94$, $\sigma=1.86$, $p<0.001$) but significant differences compared to those in the moderate change condition ($\mu=4.74$, $\sigma=1.52$, $p=0.67$) were not found.

Within the high brand nostalgia cluster, a significant main effect of change condition ($F(2, 243) = 26.18, p<0.001$) was found. Individuals in the low change condition ($\mu=6.05$, $\sigma=1.33$) reported significantly more positive attitude towards the updated brand than did individuals in the high change condition ($\mu=4.22$, $\sigma=2.01$, $p<0.001$) but did not report significantly different levels from individuals in the moderate nostalgia cluster ($\mu=5.60$, $\sigma=1.66$, $p=0.192$). Responses of individuals in the high change condition were significantly higher than those of the individuals in the moderate change condition ($p<0.001$). This supports Hypothesis 2a such that individuals reported more positive attitude towards the updated brand when the change to the brand was perceived as being smaller. Further, as stated in Hypothesis 2b, as the change to the brand increased, attitude towards the updated brand was reported as more negative. As a marginally significant interaction effect was found, support for Hypothesis 2c which anticipated a moderating effect of brand nostalgia on attitude towards the updated brand was also found.
**Attitude Towards the Company.** A 3 (change: low, moderate, high) x 3 (brand nostalgia: low, moderate, high) ANOVA was run with the attitude towards the updated brand composite measure as the dependent variable. Statistically significant main effects of brand nostalgia cluster ($F(2, 548) = 40.50, p<0.001$) and change condition ($F(2, 548) = 5.07, p=0.007$) were found but as well as a significant interaction effect ($F(4, 548) = 3.25, p=0.012$).

**Exhibit 22**

A Tukey post hoc analysis across nostalgia clusters revealed statistically significant differences between the low change condition ($\mu=5.43, \sigma=1.72$), the moderate change conditions ($\mu=4.52, \sigma=1.72$), and the high change condition ($\mu=3.58, \sigma=1.54$) where $p<0.001$. 
An analysis was then run to look for patterns in responses within brand nostalgia clusters. Within the low brand nostalgia cluster, no statistically significant main effect of change condition was found \( (F(2, 70) = 0.545, p=0.583) \) and, as such, there was no statistically significant difference between individual responses in the low change condition \( (\mu=3.60, \sigma=1.70) \), the moderate change condition \( (\mu=3.31, \sigma=1.29) \), and the high change condition \( (\mu=3.77, \sigma=1.61) \).

Within the moderate brand nostalgia cluster, a significant main effect of change condition \( (F(2, 233) = 2.95, p=0.054) \) was found. Individuals in the low change condition \( (\mu=4.79, \sigma=1.63) \) reported significantly more positive attitudes towards the updated brand than those reported by individuals in the high change condition \( (\mu=4.15, \sigma=1.86, p=0.051) \), but significant differences compared to those in the moderate change condition \( (\mu=4.62, \sigma=1.60, p=0.81) \) were not found. Further, no significant differences were found between individuals in the moderate and high change conditions \( (p=0.205) \).

Within the high brand nostalgia cluster, a significant main effect of change condition \( (F(2, 243) = 16.83, p<0.001) \) was found. Individuals in the low change condition \( (\mu=6.03, \sigma=1.25) \) reported significantly more positive attitudes towards the updated brand than did individuals in the high change condition \( (\mu=4.59, \sigma=1.91, p<0.001) \) but did not report significantly different levels from individuals in the moderate nostalgia cluster \( (\mu=5.64, \sigma=1.63, p=0.256) \). Responses of individuals in the high change condition were significantly higher than those of the individuals in the moderate change condition \( (p<0.001) \). This supports Hypothesis 2a such that individuals reported more positive attitude towards the company when the change to the brand was perceived as
being smaller. Further, as stated in Hypothesis 2b, as the change to the brand increased, attitude towards the company was reported as more negative. While an interaction effect was found showing clear evidence of the moderating effect of brand nostalgia on attitude towards the company, these findings do not fully support Hypothesis 2c.

**Affective Response to the Change.** A 3 (change: low, moderate, high) x 3 (brand nostalgia: low, moderate, high) ANOVA was run with the affective response composite measure as the dependent variable. Statistically significant main effects of brand nostalgia cluster ($F(2, 548) = 41.15, p<0.001$) and change condition ($F(2, 548) = 9.85, p<0.001$) were found, as well as a significant interaction effect ($F(4, 548) = 2.39, p=0.05$).

A Tukey post hoc analysis across nostalgia clusters revealed statistically significant differences between the low change condition ($\mu=4.15, \sigma =1.37$), the moderate change condition ($\mu=3.59, \sigma =1.17$), and the high change condition ($\mu=2.72, \sigma =0.99$) where $p<0.001$. 
An analysis was then run to look for patterns in responses within brand nostalgia clusters. Within the low brand nostalgia cluster, no statistically significant main effect of change condition was found ($F(2, 70) = 0.325, p=0.724$) and, as such, there was no statistically significant difference between individual responses in the low change condition ($\mu=2.84, \sigma=0.92$), the moderate change condition ($\mu=2.72, \sigma=0.86$) and the high change condition ($\mu=2.63, \sigma=0.90$).

Within the moderate brand nostalgia cluster, a significant main effect of change condition ($F(2, 233) = 5.18, p=0.006$) was found. Individuals in the low change condition ($\mu=3.90, \sigma=1.07$) reported significantly more positive affective response to the change than those reported by individuals in the high change condition ($\mu=3.31, \sigma=1.32$,
but significant differences compared to those in the moderate change condition ($\mu=4.53$, $\sigma=1.02$, $p=0.134$) were not found. Further, no significant differences were found between individuals in the moderate and high change conditions ($p=0.432$)

Within the high brand nostalgia cluster, a significant main effect of change condition ($F(2, 243) = 15.90$, $p<0.001$) was found. Individuals in the low change condition ($\mu=4.60$, $\sigma=1.09$) reported significantly more positive affective response than did individuals in the high change condition ($\mu=3.49$, $\sigma=1.11$, $p<0.001$), but significantly different levels than individuals in the moderate nostalgia cluster ($\mu=4.34$, $\sigma=1.36$, $p=0.397$) were not found. Responses of individuals in the high change condition were significantly higher than those of the individuals in the moderate change condition ($p<0.001$). This supports Hypothesis 2a such that individuals reported more positive affective response when the change to the brand was perceived as being smaller. Further, as stated in Hypothesis 2b, as the change to the brand increased, affective response towards the change was reported as more negative. While an interaction effect was found showing clear evidence of the moderating effect of brand nostalgia affective response to the change, these findings do not fully support Hypothesis 2c.

**Behavioral Intentions.** A 3 (change: low, moderate, high) x 3 (brand nostalgia: low, moderate, high) ANOVA was run with the behavioral intentions composite measure as the dependent variable. Statistically significant main effects of brand nostalgia cluster ($F(2, 547) = 71.17$, $p<0.001$) and change condition ($F(2, 547) = 11.93$, $p<0.001$) were found, as well as a marginally significant interaction effect ($F(4, 548) = 2.16$, $p=0.072$).
A Tukey post hoc analysis across nostalgia clusters revealed statistically significant differences between the low change condition ($\mu=5.32$, $\sigma=1.55$) and the high change condition ($\mu=3.94$, $\sigma=1.90$) where $p<0.001$, but did not show a significant difference between the low and moderate change conditions ($\mu=4.99$, $\sigma=1.70$, $p=0.13$). The analysis further revealed a statistically significant difference between the moderate change condition and the high change condition at the $p<0.001$ level.

An analysis was then run to look for patterns in responses within brand nostalgia clusters. Within the low brand nostalgia cluster, no statistically significant main effect of change condition was found ($F(2, 70) = 0.438$, $p=0.647$) and, as such, there was no statistically significant difference between individual responses in the low change
condition ($\mu=2.59, \sigma=1.30$), the moderate change condition ($\mu=2.47, \sigma=1.32$), and the high change condition ($\mu=2.26, \sigma=1.12$).

Within the moderate brand nostalgia cluster, a significant main effect of change condition ($F(2, 233) = 5.60, p=0.004$) was found. Individuals in the low change condition ($\mu=4.00, \sigma=1.39$) reported significantly higher behavioral intentions towards the updated brand than those reported by individuals in the high change condition ($\mu=3.25, \sigma=1.64, p=0.005$) but did not report significant differences compared to those in the moderate change condition ($\mu=3.87, \sigma=1.45, p=0.853$). Significant differences were found between individuals in the moderate and high change conditions ($p=0.029$).

Within the high brand nostalgia cluster, a significant main effect of change condition ($F(2, 242) = 18.35, p<0.001$) was found. Individuals in the low change condition ($\mu=5.41, \sigma=1.20$) reported significantly higher behavioral intentions than did individuals in the high change condition ($\mu=3.39, \sigma=1.99, p<0.001$), but did not report significantly different levels than individuals in the moderate nostalgia cluster ($\mu=5.02, \sigma=1.63, p=0.281$). Responses of individuals in the high change condition were significantly higher than those of the individuals in the moderate change condition ($p<0.001$). This supports Hypothesis 2a such that individuals reported more positive behavioral intentions when the change to the brand was perceived as being smaller. Further, as stated in Hypothesis 2b, as the change to the brand increased, behavioral intentions were reported as more negative. As a marginally significant interaction effect was found showing clear evidence of the moderating effect of brand nostalgia on behavioral intentions, these findings do not fully support Hypothesis 2c.
**Oreo Cookie Hypothesis 2 Tests**

To test Hypothesis 2, that an individual’s brand nostalgia moderates his/her response to changes in the brand, an MANCOVA was run with the Oreo Cookie change condition as the independent variable and attitude towards the updated brand, attitude towards the company, affective response to the change and behavioral intentions using brand nostalgia as a covariate. The MANCOVA returned significant main effects of nostalgia cluster on all four of the main dependent variables as seen below:

| Exhibit 25
<table>
<thead>
<tr>
<th>Variable</th>
<th>F-Statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Towards the Updated Brand</td>
<td>71.47</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Attitude Towards the Company</td>
<td>68.02</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Affective Response</td>
<td>52.49</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Behavioral Intentions</td>
<td>112.40</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Following the confirmation of significant main effects, a series of 3x2 ANOVAs are run to better test Hypothesis 2. Covariates were not used in testing these hypotheses.

*Attitude Towards the Updated Brand.* A 3 (change: low, moderate, high) x 2 (brand nostalgia: low, high) ANOVA was run with the attitude towards the updated brand composite measure as the dependent variable. Statistically significant main effects of brand nostalgia cluster ($F(2, 548) = 71.54, p<0.001$) and change condition ($F(2, 548) = 13.95, p<0.001$) were found but no significant interaction effect was reported ($F(4, 548) = 1.00, p=0.367$).
Further analysis of the main effects show that across nostalgia clusters, individuals reported more positive attitudes towards the updated brand for the low change condition ($\mu=5.54, \sigma=0.11$) than the moderate change condition ($\mu=4.92, \sigma=0.11$) and the high change condition ($\mu=4.76, \sigma=0.11$), each where $p \leq 0.001$. This supports Hypothesis 2a such that individuals reported more positive attitude towards the updated brand when the change to the brand was perceived as being smaller. Further, as stated in Hypothesis 2b, as the change to the brand increased, attitude towards the updated brand was reported as more negative. As no interaction effect was found, no support for Hypothesis 2c
which anticipated a moderating effect of brand nostalgia on attitude towards the updated brand was found.

**Attitude Towards the Company.** A 3 (change: low, moderate, high) x 2 (brand nostalgia: low, high) ANOVA was run with the attitude towards the company composite measure as the dependent variable. Statistically significant main effects of brand nostalgia cluster ($F(2, 543) = 67.99, p<0.001$) and change condition ($F(2, 548) = 10.95, p<0.001$) were found but no significant interaction effect was reported ($F(4, 548) = 0.61, p=0.544$).

Further analysis of the main effects shows that individuals in the low change condition reported significantly more positive attitude towards the company ($\mu=5.49, \sigma=0.11$) than did individuals in the moderate change condition ($\mu=4.95, \sigma=0.11$,
\( p=0.003 \) and individuals in the high change condition (\( \mu=4.80, \sigma=0.11, p<0.001 \)). There was no statistically significant difference in reported attitude towards the company between the moderate and high change conditions (\( p=0.85 \)). Again, these findings provide support for Hypotheses 2a and 2b, such that reported attitude decreases as the perceived change to the brand increases but fails to provide support for Hypothesis 2c by failing to show a moderating effect of brand nostalgia on consumer responses.

**Affective Response Towards Change in the Brand.** A 3 (change: low, moderate, high) x 2 (brand nostalgia: low, high) ANOVA was run with the affective response composite measure as the dependent variable. Statistically significant main effects of brand nostalgia cluster (\( F(2, 543) = 52.49, p<0.001 \)) and change condition (\( F(2, 548) = 10.00, p<0.001 \)) were found but no significant interaction effect was reported (\( F(4, 548) = 0.69, p=0.504 \)).
Further analysis of the main effects found that individuals in the low change condition reported significantly more positive affective responses towards the change ($\mu=4.29$, $\sigma=0.09$) than did individuals in the moderate change condition ($\mu=3.94$, $\sigma=0.09$, $p=0.019$) and individuals in the high change condition ($\mu=3.75$, $\sigma=0.09$, $p<0.001$).

There was no significant difference in affective response for individuals in the moderate and high change conditions ($p=0.512$). As with the previous dependent variables, support for Hypotheses 2a and 2b is found but again, this analysis fails to support Hypothesis 2c.
**Behavioral Intentions.** A 3 (change: low, moderate, high) x 2 (brand nostalgia: low, high) ANOVA was run with the behavioral intentions composite measure as the dependent variable. Statistically significant main effects of brand nostalgia cluster ($F(2, 543) = 112.77, p<0.001$) and change condition ($F(2, 548) = 12.63, p<0.001$) were found but no significant interaction effect was reported ($F(4, 548) = 1.53, p=0.218$).

Further analysis of the main effects found that individuals in the low change condition reported moderately significantly more positive behavioral intentions towards the change ($\mu=4.90, \sigma=0.10$) than did individuals in the moderate change condition ($\mu=4.51, \sigma=0.10, p=0.061$) and individuals in the high change condition ($\mu=4.13, \sigma=0.10, p<0.001$). There was no significant difference in behavioral intentions for individuals in the
moderate and high change conditions \((p=0.134)\). As with the previous dependent variables, support for Hypotheses 2a and 2b is found but again, this analysis fails to support Hypothesis 2c.

**Discussion**

As in the first study, the findings in this study support the hypothesized effects of this dissertation, namely that an individual’s brand nostalgia will moderate their response towards change in a brand. This study adds additional credibility to the findings in the first study by recruiting a more representative subset of the population and not relying on undergraduate students as subjects. Further, this study expanded the product categories examined from breakfast cereals to include both snack foods and cartoon characters. Although the findings for the Oreo cookie component of the study did not lead to significant results, they have provided additional questions to be explored in future studies: Why was there no significant interaction effect of brand nostalgia and change condition? Are some brands less susceptible to these effects than others? Is frequency of exposure a factor in consumer response? Are there product attributes that are so salient to the brand that manipulation of these attributes will result in negative affective and attitudinal responses, regardless of the individual’s brand nostalgia? These questions will provide the author with a significant stream of research to explore following the completion of this dissertation.
Chapter 6

General Discussion

This dissertation sought to examine the effects of brand nostalgia on consumer responses to changes in the brands towards which they are nostalgic. The findings supported the two hypotheses for two of the three brands tested, suggesting a moderating effect of brand nostalgia on consumer responses to changes in brands towards which they are nostalgic.

Summary of Findings

The first step in establishing the connection between consumer responses to changed brands and brand nostalgia was to develop a scale to measure the construct of brand nostalgia. Over the course of five studies, the scale was developed, refined, tested for nomological, convergent and discriminant validity, and finally tested for language choices to ensure no response bias due to the choice of “childhood” or “youth” language. The resulting scale is a 7-item scale with a reliability value consistently above 0.90. Utilizing this scale, additional tests were run to test the hypotheses developed in this dissertation.

Study 1 was a qualitative study designed to lead towards a better understanding of the differences in consumer processing and storage of information for brands towards which they are nostalgic, contrasted with brands towards which they hold no nostalgia. Subjects were interviewed one at a time and were asked probing questions designed to elicit their individual schemas for a pre-selected brand, Lucky Charms cereal, and a self-generated brand towards which he or she was nostalgic. A clear difference in response
patterns was found when subjects spoke of brands they are nostalgic towards when compared to those they are not nostalgic towards.

Specifically, subject responses varied significantly in terms of the type and amount of information recalled when discussing a brand towards which they were nostalgic. When discussing brands they were not nostalgic towards, subjects tended to give fact-based semantic information, including product attributes and characteristics, with little additional information provided. Conversely, when asked for information regarding a self-selected nostalgic brand, subjects invariably provided a great deal of episodic and affective information about the brand with scant attention paid to the semantic details. These affect-laden memories also tended to involve others, either friends or family, with whom the individual associated the brand; individuals regularly reported consuming the brand to feel more attached to the individuals from their past.

These findings suggest that when an individual recalls information about a brand towards which he or she is nostalgic, the information accessed is much more detailed than the information for a non-nostalgic brand and, when recalled, elicits not just stored facts about the brand but instead accesses a complex, robust schema which includes a great deal of affective information and connections to friends and family. Thus, when encountering a change to the brand towards which the individual is nostalgic, the individual will process the change differently, leading to more pronounced reactions to the change, when compared to their non-nostalgic counterparts.

Study 2 is the first quantitative study in this dissertation, designed to test the hypotheses developed in Chapter 2. Subjects were randomly assigned into high, moderate
or low change conditions for Lucky Charms cereal and their brand nostalgia for Lucky Charms was measured, allowing the subjects to be clustered by brand nostalgia. Significant main effects of both brand nostalgia and change condition were found, as well as an interaction effect between the two, suggesting a moderating effect of brand nostalgia on attitudinal, affective and behavioral responses to the change in the brand.

Subjects in the high brand nostalgia cluster also showed a greater perceived degree of change across change conditions than did individuals in the low brand nostalgia cluster, indicating increased sensitivity to the degree of change in their brand. Subjects in the low change condition responded positively to the change in the brand, regardless of their brand nostalgia cluster. As the change to the brand increased, subjects began to reject the change with the highly brand nostalgic individuals showing a more pronounced negative response in affective, attitudinal and behavioral intentions than did individuals in the moderate or low brand nostalgia cluster. Moreover, subjects in the low and moderate change condition frequently failed to show significantly different responses to changes in the brand, regardless of the degree of change.

Study 3 was designed to replicate the effects found in Study 2 while expanding the applicability of the findings through the use of a non-student sample as well as through the selection of additional brands in different product categories. In this study, subjects were shown manipulated brand images for the Mickey Mouse character as well as Oreo cookies. The results of Study 2 were replicated with the Mickey Mouse stimuli, including significant main effects of brand nostalgia and change condition, as well as a significant interaction effect. Significant main effects of brand nostalgia and change condition were found in the Oreo cookie test but no significant interaction effect between
brand nostalgia and change condition was found. This suggests there may be additional moderating factors to examine in future research.

**Contribution to the Literature**

This dissertation contributes to the nostalgia and brand relationship literature in several ways. First, in this dissertation, I refine the current understanding of nostalgia as directed towards a brand, as opposed to the current perceptions of nostalgia as a psychographic tendency (Holbrook and Schindler 1991) or the more broadly defined bonded nostalgia (Schindler and Holbrook 2003). I also develop and validate a scale which will allow future researchers to measure an individual’s self-reported brand nostalgia.

I have also contributed to the brand relationship literature by examining the nostalgic component of the consumer/brand relationship, a facet which has been overlooked. Previous researchers (Fournier 1998; Smit, Bronner and Tolboom 2006) have briefly mentioned nostalgia as a facet of the consumer/brand relationship but have not explored it more completely. In developing the brand nostalgia construct, I have also bridged the gap between the nostalgia and brand relationship literature to provide a more comprehensive understanding of the construct.

By examining the development of brand nostalgia, I have identified two necessary components that must exist in order for brand nostalgia to develop, social connectedness and ritualistic consumption. This is significant as ritualized consumption is an accepted component of the consumer brand relationship (Belk 1988) but I have also identified a
unique aspect of the brand nostalgia relationship, namely the use of the brand to encourage or maintain social connectedness. Specifically, individuals who are brand nostalgic will use these brands to connect with others, be they family, friends or future generations. This is particularly significant as it can help explain why the love for certain brands endures while other brands seem to be tied to specific generations and may lose salience as generations pass.

I also examined the differences between schemas for nostalgic and non-nostalgic brands and found evidence of differences in schema structure. When an individual is nostalgic for a brand, the schematic structure for the brand will be much more complex and affect-laden compared to the schematic structure for a non-nostalgic brand which is comprised primarily of semantic information. Further, a schema for a nostalgic brand will contain episodic memories of brand consumption. These episodic memories will also contain connections to friends or family, reaffirming the social connectedness aspect of the nostalgic brand relationship. Finally, I tested the moderating effect of brand nostalgia on consumers’ responses to changes in brands and showed that the differences in schema structure contributed to greater perceived changes and a smaller latitude of acceptance for changes, which can help to explain why objective “improvements” to brands may be rejected by nostalgic consumers.

Contributions to Marketing Practice

The contributions of this dissertation to marketing practice are significant. As discussed in the introductory chapter, the use of nostalgia as a marketing tool is frequently employed by companies looking to increase sales of flagging brands or to
expand their brand portfolio by reintroducing brands that have not been available for years. This tactic has been met with mixed results; sometimes the campaign is quite successful while other times the tactic is an unmitigated failure. By providing marketers with the tools to better understand their target market and to better understand what types of change can be made without alienating consumers, marketers will be able to continue to use nostalgia in their marketing with greater success.

For example, if marketers are trying to capitalize on the nostalgic cache their brand may hold, they must be very careful to avoid updating the brand in such a way that will alienate their target market. Further, these marketers must recognize that changes to the brand, even those which would be viewed as an improvement by the average observer, may be perceived as a violation by the nostalgic individuals. Marketers must take care to understand who their target market is before making large changes to a brand with nostalgic cache. For example, if a brand is no longer being purchased by brand nostalgic individuals, updating the brand to reach a new market may be the most strategically sound decision. Conversely, if the brand is still being consumed by nostalgic consumers, a change may alienate this demographic without acquiring a new consumer base.

**Directions for Future Research**

While this dissertation has contributed significantly to both practical and academic knowledge, the findings have lead to several additional questions to be researched in upcoming studies. The first research opportunity stemming from this work will address the findings in Study 3. While significant interaction effects were found for
two of the three brands tested in this dissertation, no significant interaction effects were found for the Oreo Cookie brand. One possible reason for this is that Oreo cookies are consumed more regularly by adults than Lucky Charms cereal or Mickey Mouse items. This suggests that recency of consumption may play a role in consumer responses to changed nostalgic brands.

Schema theory suggests that each encounter with an item will serve to update the schema for that item. Therefore, if an individual has continued to consume the brand, small changes and updates to the brand will be incorporated into the schema such that the updated schema, while still affect-laden, will be more in-line with the current brand, rather than the brand as it was. I therefore expect that individuals who regularly consume brands towards which they are nostalgic will be more accepting of the change to the brand than will individuals who are brand nostalgic but no longer consume the brand. Marketers must therefore be careful when reintroducing brands that have been unavailable for a period of time. If consumers have been unable to consume the brand, the potential for negative affective, attitudinal and behavioral responses is great.

Another area for exploration comes from the subject interviews in Chapter 4. Many subjects indicated a desire to share the love for their nostalgic brands with future generations. However, this begs the question of how recipients will respond to these brands as technology and trends change. Would the gift of an antiquated or outdated brand be well received by a child or grandchild or will the carefully preserved item be shunned? Brands from two product categories, movies and toys, were more likely to be shared with or saved for future generations. These two product categories are frequently updated and refined to keep up with current trends and technology, as demonstrated by
the GI Joe and Transformer examples in Chapter 1. If the parents have shared the brand with their children as a form of social connectedness, will the potential rejection of the brand negatively impact the parents’ nostalgia or will children embrace the nostalgic brand as a means to increase their connectedness to the parent? Are there developmental stages where the children are more or less likely to accept the nostalgic brand? A better understanding of these questions can influence marketing strategy for brands with nostalgic cache and can lead marketers to more directly target their key market.

An additional path for discovery should look at brand nostalgic consumers who were denied the brand in their youths. Observations of the marketplace and during the qualitative interviews in this dissertation suggest that a number of consumers will become heavily engaged with these brands as adults and will make significant efforts to acquire brands they were denied in their childhood. As these consumers may become heavy users of the brand, further exploration of the possible differences in these consumers and the brand must be examined. Are there particular psychographic characteristics that will encourage individuals to actively seek out the brands they were denied? Do these individuals have different consumption behaviors or attitudes towards the brands than do non-nostalgic individuals or nostalgic individuals who did consume the brand in the past? If the brand nostalgic individuals who were denied the brand in their past do become heavy users of the brand, this may change the relationship with the brand in several ways. First, if the brand relationship has developed to the point of obsession or codependence, are these individuals likely to respond to changes in the brand in the same way the standard brand nostalgic individual does or are these individuals a special case? Should special attention be paid to this potentially valuable market segment?
From a practical standpoint, many questions come to mind. Can companies continue to capitalize on nostalgic feelings towards a brand or is there an expiration date on the longevity of brand nostalgia? Are there times when it is appropriate to reintroduce a nostalgic brand and other times to delay the reintroduction? Are there occasions when a large change to a brand, one that may alienate brand nostalgic consumers is the best course of action?

This dissertation has shown that brand nostalgic individuals are a distinct group of consumers who interact with their brands in a unique manner. By extending the nostalgia and brand relationship literature to better understand this consumer, this dissertation has contributed to the literature and has set forth a path of study to help both academic and practical marketers better understand how to interact with this group.
## Appendices

### Appendix 1

### Scales

#### Self-Reported Nostalgia Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Low Anchor</th>
<th>High Anchor</th>
</tr>
</thead>
<tbody>
<tr>
<td>How nostalgic do you feel towards this brand?</td>
<td>1= Not at all Nostalgic</td>
<td>7= Very Nostalgic</td>
</tr>
<tr>
<td>How strong is your nostalgia for this brand?</td>
<td>1= Very Weak</td>
<td>7= Very Strong</td>
</tr>
<tr>
<td>How positive or negative are your memories of this brand?</td>
<td>1= Very Negative</td>
<td>7= Very Positive</td>
</tr>
<tr>
<td>How closely is this brand associated with your childhood?</td>
<td>1= Not at all Closely</td>
<td>7= Very Closely</td>
</tr>
<tr>
<td>How special was this brand to you in your childhood?</td>
<td>1= Not at all Special</td>
<td>7= Very Special</td>
</tr>
</tbody>
</table>

#### Attitude Towards the Brand (Shamdasani, Stanaland and Tan (2000))

<table>
<thead>
<tr>
<th>Item</th>
<th>Low Anchor</th>
<th>High Anchor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you think this was a good brand or a bad brand?</td>
<td>1= This was a bad brand</td>
<td>7= This was a good brand</td>
</tr>
<tr>
<td>How much did you like or dislike this brand?</td>
<td>1= I disliked this brand</td>
<td>7= I liked this brand</td>
</tr>
<tr>
<td>How negatively or positively did you feel about this brand?</td>
<td>1= I felt negatively about this brand</td>
<td>7= I felt positively about this brand</td>
</tr>
<tr>
<td>Did you think this was a nice brand or an awful brand?</td>
<td>1= This brand was awful</td>
<td>7= This brand was nice</td>
</tr>
<tr>
<td>How pleasant or unpleasant did you find this brand?</td>
<td>1= This brand was unpleasant</td>
<td>7= This brand was pleasant</td>
</tr>
<tr>
<td>Did you find this brand to be attractive or unattractive?</td>
<td>1= This brand was unattractive</td>
<td>7= This brand was attractive</td>
</tr>
</tbody>
</table>

#### Brand Commitment – Yoo, Donthu and Lee (2000)

<table>
<thead>
<tr>
<th>Item</th>
<th>Low Anchor</th>
<th>High Anchor</th>
</tr>
</thead>
<tbody>
<tr>
<td>I consider myself to be loyal to _________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>_________ would be my first choice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would not buy other brands if _________ is available at the store.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Loyalty Proneness (Brand) – Ailawadi, Neslin and Gednek (2001)

<table>
<thead>
<tr>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>I prefer one brand of most products I buy</td>
</tr>
<tr>
<td>I am willing to make an effort to search for my favorite brand</td>
</tr>
<tr>
<td>Usually, I care a lot about which particular brand I buy</td>
</tr>
</tbody>
</table>

### Product Loyalty – Campo, Gijsbrechts and Nisol (2000)

<table>
<thead>
<tr>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think of myself as a loyal buyer of ________</td>
</tr>
<tr>
<td>I would rather stick with a brand I usually buy than try something I am not sure of</td>
</tr>
<tr>
<td>I like to switch to different brands of ____________</td>
</tr>
</tbody>
</table>

### Nostalgia Proneness – Holbrook (1993)

<table>
<thead>
<tr>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>They don’t make ‘em like they used to.</td>
</tr>
<tr>
<td>Things used to be better in the good old days.</td>
</tr>
<tr>
<td>Products are getting shoddier and shoddier.</td>
</tr>
<tr>
<td>Technological change will insure a brighter future. (r)</td>
</tr>
<tr>
<td>History involves a steady improvement in human welfare.</td>
</tr>
<tr>
<td>We are experiencing a decline in the quality of life.</td>
</tr>
<tr>
<td>Steady growth in the GNP has brought increased human happiness.</td>
</tr>
<tr>
<td>Modern business constantly builds a better tomorrow.</td>
</tr>
</tbody>
</table>

### Vividness of Memory – Sutin and Robins (2007)

<table>
<thead>
<tr>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>My memory for this event (my childhood) is very clear</td>
</tr>
<tr>
<td>My memory for (my childhood) is very vivid</td>
</tr>
<tr>
<td>My memory for (my childhood) is very detailed</td>
</tr>
<tr>
<td>My memory for (my childhood) is very dim (r)</td>
</tr>
<tr>
<td>My memory for (my childhood) is very vague (r)</td>
</tr>
<tr>
<td>My memory for (my childhood) is sketchy (r)</td>
</tr>
</tbody>
</table>

### Emotional Intensity – Sutin and Robins (2007)

<table>
<thead>
<tr>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>As I am remembering the experience now, my feelings are very intense</td>
</tr>
<tr>
<td>My emotions are very intense concerning (my childhood) this event</td>
</tr>
<tr>
<td>The memory of (my childhood) evokes powerful emotions</td>
</tr>
<tr>
<td>I do not remember having particularly strong emotions at the time of this event</td>
</tr>
<tr>
<td>I do not have strong emotions about this event (r)</td>
</tr>
<tr>
<td>This memory does not evoke strong emotions in me (r)</td>
</tr>
</tbody>
</table>
Memory Valance – Sutin and Robins (2007)

The overall tone of the memory is positive
The experience described in this memory is positive
My feelings at this time were positive
The overall tone of the memory is negative (r)
The experience described in this memory is negative (r)
My feelings at this time were negative (r)

Behavioral Intentions

I would be very excited to consume this brand
I would purchase this brand because it reminds me of my childhood
If I had the opportunity to use this brand, I would
If this brand was available, I would be happy/excited
If presented with the opportunity to use this brand, I would do so

Positive Affect Negative Affect Scale

<table>
<thead>
<tr>
<th>Positive Affect Negative Affect Scale</th>
<th>Low Anchor</th>
<th>High Anchor</th>
</tr>
</thead>
<tbody>
<tr>
<td>How enthusiastic would you feel about (brand) if the change occurred?</td>
<td>1 = Very Unenthusiastic</td>
<td>7 = Very Enthusiastic</td>
</tr>
<tr>
<td>How interested would you be in (brand) if the change occurred?</td>
<td>1 = Very Uninterested</td>
<td>7 = Very Interested</td>
</tr>
<tr>
<td>How excited would you be about (brand) if the change occurred?</td>
<td>1 = Very Unexcited</td>
<td>7 = Very Excited</td>
</tr>
<tr>
<td>How upset would you feel about (brand) if the change occurred?</td>
<td>1 = Very Upset</td>
<td>7 = Not at all Upset</td>
</tr>
<tr>
<td>How positively would you feel about (brand) if the change occurred?</td>
<td>1 = Very Negative</td>
<td>7 = Very Positive</td>
</tr>
<tr>
<td>How much would you like (brand) if the change occurred?</td>
<td>1 = Dislike Very Much</td>
<td>7 = Like Very Much</td>
</tr>
<tr>
<td>How happy would (brand) make you feel if the change occurred?</td>
<td>1 = Very Unhappy</td>
<td>7 = Very happy</td>
</tr>
</tbody>
</table>
Brand Nostalgia

I have fond memories of this brand from my childhood.
This brand played a larger role in my childhood than other brands.
This brand is one of my favorite brands from my childhood.
I still feel positive about this brand today because it reminds me of my childhood.
I have positive emotions towards this brand because I used it when I was younger.
This brand features in happy memories of when I was younger.
As a child, I always wanted this brand, and some part of me still does.

<table>
<thead>
<tr>
<th>Manipulation Check</th>
<th>Low Anchor</th>
<th>High Anchor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compared to Lucky Charms as you remember it from your childhood,</td>
<td>1= Not at all</td>
<td>7= Very Different</td>
</tr>
<tr>
<td>how different do you think (manipulation) would be?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compared to Lucky Charms as you remember it from your childhood,</td>
<td>1= Very Small</td>
<td>7= Very Large Change</td>
</tr>
<tr>
<td>how big a change do you think (manipulation) would be?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compared to Lucky Charms as you remember it from your childhood,</td>
<td>1= Not at all</td>
<td>7= Very New</td>
</tr>
<tr>
<td>how new do you think (manipulation) would be?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency and Usage Questions</th>
<th>Low Anchor</th>
<th>High Anchor</th>
</tr>
</thead>
<tbody>
<tr>
<td>How familiar are you with Lucky Charms cereal?</td>
<td>1= Not at all Familiar</td>
<td>7= Very Familiar</td>
</tr>
<tr>
<td>As a child, how frequently did you eat Lucky Charms cereal?</td>
<td>1= Never</td>
<td>7= Regularly</td>
</tr>
<tr>
<td>As an adult, how frequently do you eat Lucky Charms cereal?</td>
<td>1= Never</td>
<td>7= Regularly</td>
</tr>
<tr>
<td>When was the last time you purchased Lucky Charms cereal?</td>
<td>Within the past week, past month, past six months, past year, past five years, I've never purchased Lucky Charms Cereal</td>
<td></td>
</tr>
<tr>
<td>When was the last time you consumed Lucky Charms cereal?</td>
<td>Within the past week, past month, past six months, past year, past five years, I've never consumed Lucky Charms Cereal</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2

Undergraduate Sample – Nostalgic Brand Responses and Frequencies

<table>
<thead>
<tr>
<th>Brand</th>
<th>Frequency</th>
<th>Brand</th>
<th>Frequency</th>
<th>Brand</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>11</td>
<td>Spaghetti</td>
<td>2</td>
<td>Colgate</td>
<td>HTC</td>
</tr>
<tr>
<td>Barbie</td>
<td>10</td>
<td>Special K</td>
<td>2</td>
<td>Converse</td>
<td>In Living Color</td>
</tr>
<tr>
<td>Nike</td>
<td>9</td>
<td>Starbucks</td>
<td>2</td>
<td>Converse</td>
<td>iPhone</td>
</tr>
<tr>
<td>Lego</td>
<td>7</td>
<td>Teenage Mutant Ninja Turtles</td>
<td>2</td>
<td>Cookie Crisp</td>
<td>It’s a Wonderful Life</td>
</tr>
<tr>
<td>Coca Cola</td>
<td>6</td>
<td>Verizon</td>
<td>2</td>
<td>Count Chocula</td>
<td>JuJu Fruits</td>
</tr>
<tr>
<td>Sony</td>
<td>6</td>
<td>Wendy’s</td>
<td>2</td>
<td>Craftsman</td>
<td>Keds</td>
</tr>
<tr>
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Appendix 3
Adult Sample – Nostalgic Brand Responses and Frequencies

Legos-40
Barbie-24
Coca-Cola-16
My Little Ponies-14
Disney-13
Nintendo-12
Star Wars-12
Lucky Charms-10
Apple-9
Lincoln Logs-9
Oreo Cookies-9
Ford-8
Quaker Oatmeal-8
Cap'n Crunch Cereal-7
Cheerios-7
Kleenex-7
Play-Doh-7
Campbell's Soup-6
Crayola-6
Hershey's-6
Nesquik-6
Atari game system-5
Ben & Jerry's Ice Cream-5
Breyers Ice Cream-5
Golden Grahams Cereal-5
Knit Picks -5
Levi's-5
McDonald's-5
Nike-5
Strawberry Shortcake toys (1980s version)-5
Coco Puffs cereal-4
Converse All-Stars-4
Crest Toothpaste-4
Diet Coke-4
Dr. Pepper-4
Fisher-Price-4
Harry Potter-4
Ivory-4
Kellogg's-4
Kix cereal-4
Kool-Aid-4
Kraft-4
Kraft Mac N' Cheese-4
Little Debbie snack cakes-4
Looney Toons-4
Macy's-4
Nilla Wafers-4
Pop Rocks-4
Pop Tarts-4
Rainbow Brite-4
She-Ra-4
Smuckers preserves-4
Star Trek-4
Tang orange drink-4
Tinker Toys-4
Volkswagen-4
Wizard of Oz-4
American Girls Dolls/Books-3
Cabbage Patch Kid Doll-3
Canon-3
Care Bears-3
Chevrolet-3
Cinnamon Toast Crunch Cereal-3
Colgate Toothpaste-3
Cream of Wheat-3
Disney Movies-3
Easy Bake Oven-3
G.I. Joe-3
Hello Kitty-3
Hot Wheels-3
Indiana Jones-3
Jif Peanut Butter-3
Jurassic Park-3
Lexus-3
Little Golden Books-3
Nancy Drew-3
Nickelodeon-3
Oil of Olay-3
Original Coke (real sugar)-3
Oscar Meyer-3
Quaker-3
Smurfs-3
Spaghetti-Os-3
Spirograph-3
Tampax-3
Teenage Mutant Ninja Turtles-3
The Simpsons-3
Thundercats-3
Tide-3
Transformers-3
Twizzlers-3
Underoos-3
Velveeta-3
Windex-3
Winnie-the-Pooh-3
A&W root beer-2
Amazon.com-2
Apple Jacks-2
Baby Magic-2
BMW-2
Brown Sheep Yarn-2
Capri Sun-2
Carnation Instant Breakfast bars-2
Chef Boyardee-2
Coach -2
Count Chocula cereal-2
Cover Girl-2
Disneyland-2
Doc Martens Shoes-2
Doritos-2
Dunkin' Donuts-2
Eggo Waffles-2
Froot Loops-2
Frosted Flakes-2
General Mills-2
Gremlins-2
Gummi Bears-2
Hasbro-2
Heinz-2
Heinz Ketchup-2
Hershey Kisses-2
Hershey's Cocoa-2
Hi Q games: Pythagoras-2
Honda-2
Honey Nut Cheerios-2
Huffy-2
Jem and the Holograms-2
Land Before Time-2
Lay's-2
Liptons-2
LiteBrite-2
Malabrigio yarn-2
Marvel Comics-2
Miracle Whip-2
Monopoly-2
Monty Python and the Holy Grail-2
Nehi-2
Nestle-2
Nutella-2
Oakley-2
Oldsmobile-2
Olive Garden-2
Osh Kosh B'Gosh-2
Ovaltine-2
Ping-2
Playmobil-2
Polaroid-2
Polly Pocket-2
Princess Bride-2
Rice Krispies-2
Schwinn-2
Sega Genesis game console & games-2
Skippy-2
Sonic the Hedgehog-2
Squirt-2
Suave-2
The Muppet Show-2
The Princess Bride-2
Ticonderoga-2
Tonka-2
Tootsie Pop-2
Toyota-2
Trader Joe's-2
Wilson-2
Swiss Miss Cocoa mix-2
$100,000 Pyramid game show
101 Dalmatians (animated movie)
16 candles (movie)
1959 VW Bug Convertible
24 t.v. show
3D Doritos
60s & 70s 45rpm vinyl records
A Mighty Fortress is Our God
ABC
Airwalks
Almond Joy
Amelie
American Airlines
American Motors
Ammen's Powder
An American Tale
Animaniacs
Anita Blake Vampire Hunter book series
Ann Taylor
Annie (movie version)
Anthropolgie
Any brand teddy bears
anything peanuts...charlie brown, snoopy, lucy
Apian Way Pizza
Apple iPod
Aqua Net
Archway
Ariat
AT&T
Athenos Hummus
Austin Powers
Aveda
Avon
Baby Ruth Candy Bar
Back To the Future Movie Trilogy
Bailey's Irish Cream
Bambi
Band-aid
Barnes and Noble
Barq's Root Beer
Baseball Cards
Basic 4 cereal
Baskin Robbins
Batman
Battle Hymn of the Republic
Beatles
Beeman's gum
Beer Chaser Crackers
Benny Goodman
Berry Blue Kool Aid
Betsy Johnson
Better Off Dead
Bianchi
Big Cherry (candy bar)
Big Fish (movie)
Big Lebowski
Bill Nye the Science Guy
Birkenstock
Blue Plate Mayo
Boca
Bonne Bell lip smackers
Boo Berry Crunch
Boone's
Borden's milk (delivered by milkman)
Borders Books
Bosco syrup
Boston Blackie
Bounce
Bounty
Boye
Breakfast Club
Breyer horses
Brooklyn Dodgers
Brooks Brothers
Browning
Bubble Tape
Budweiser Clydesdale commercials
Bunny Bread
Burger King
Bush's
Cabot Creamery
Cascade 220 Yards
Cadbury Eggs
Caddy Shack
Campbell's Bean & Bacon soup
Campbell's Tomato Soup
Canada Dry
Captain Morgan
Caribou Coffee
Caron yarns
Carter's
Casablanca
Cascade Dishwasher Detergent
Chanel no. 22
Chap-Stick
Charles Chips
Charlie Gibson / Walter Cronkite
Cheer
Cheerwine
Cheetos
Cheetos paws
Chicken of the Sea
Chick-fil-a
Children's Place
Chips
Chitty Chitty Bang Bang (movie)
ChrisMutt
Chutes and Ladders
Cincinnati Reds
Claire's
Clarins
Cleveland Metroparks Zoo
Clinique
Close-Up
Coca Krispies
Coca Pebbles
Coke with real sugar
Coldwater Creek Clothing
Coleman
Colgate Powder Toothpaste
Compaq computers
Compserv
Cookie Crisp Cereal
Corning
Corvette Automobile
Country Crock
Cracker Jack
Crash Bandicoot
Crest Kids Toothpaste
Crisco
Crocs (shoes)
Cronchy Stars cereal
Crystal light
Daisy Razors
Datsun
Dawn Blue Original
Dawn of the Dead
DazBog
Degrassi Jr High (Original Series)
Devil Dogs
Dial bath soap
Dial Soap
Diet Coke with Lime
DiGiorno
Discovery Toys
LL Bean
LOG CABIN SYRUP
Longaberger
Love's Baby Soft
Lunchables
Lush
M&Ms
Madelinetosh
Magic Sand
Magic Shell
Magnavox
Magnum tropical ice cream bars
Mallo Cup
Mane 'n Tail
Manic Panic
Marie Callendar's pie
Marlboro
Martin
Mary Kay
Mary Poppins
Matchbox
Mattel
Maull's
Mazda
McGarvey
Men In Black
Metroid
Miami University (Oxford, OH)
Milk Duds
Miller's Outpost
Milton Bradley
Miyuki (beads)
Morton
Mothers Circus Animal cookies
Motorola
Motts Apple Juice
Mountain Dew
Mr. Coffee
Mrs T
Mrs. 'Arris Goes to Paris (movie)
Mrs. Buttersworth Syrup
Mrs. Fearnow's
Muppet Babies
Muppets
Mustang
My Child Dolls
My Girl
My-T-Fine Chocolate Pudding
Nabisco Shredded Wheat
Nacho Cheetos
National Lampoon's/Chvy Chase movies
Nature Valley
NBC
Necco Wafers
Nerds
Nestea
Nestle Syrup
Nestle Toll House Chocolate Chips
Neutrogena
Neverending Story
New York & Co.
Nifty Notebook
Nikon
Nintendo Gameboy
Nivea
Noble Roman's pizza
Noro yarn
Noxema
Nyquil
Ohio State Buckeyes
Old B&W Monster Movies: Werewolf, Dracula
Old ElPaso
Old Spice
O'Neills Department Store OPI
Oprah Winfrey
orginal Hawaii 5-0
Original Star Wars trilogy
Otter Pops
Pac-Man
Palm phones
Palmolive soap
Parkay Butter
Parker Brothers
Pee Wee Herman
Peeps
Penn
Pepperidge Farm (stuffing)
Pepperidge Farms
Pepsi
Perdue Boneless Skinless Chicken Breasts
Perkins
Peter Pan Peanut Butter
Pete's Dragon
Pillsbury
Pilot Pens
Pine-Sol
Pink Popcorn from the Zoo
Pixar
Pixie Stick
Play Skool
Pledge
Pogs
Pokemon
Polsky's
Pond's
Popsicles
Post
Post Fortified Oat Flakes
Pottery Barn
Power Wheels
Prego
Pretty Woman
Princess Mononoke Movie
Puffs
Pulp Fiction
Pumpkin Pie
Purex
Purina
Quaker Cheddar Rice Snacks
R. L. Stine's Goosebumps series of books
RC Cola
RCA
Reading Rainbow
Real Genius
Red Fusion
Red Heart
Redken
Reebok
Reeces Peanut Butter Cups
Reeces Pieces
REI (camping/hiking equipment)
Remember The Titans movie
Revere
Rice-a-Roni
Rider's Jeans
Risk
Ritzman's Pharmacy
Rock Island RR
Rocko's Modern Life
Roman Holiday
Rotary dial phones- no idea what brand
Royal Caribbean
Saab automobiles
Safeway
Same Time Next Year (movie)
samsung
Schrirner Scores
Scholastic
Scottsdale, Arizona
Scrabble
Scrabletines
Sears / Kenmore
See's
Sega
Sense and Sensibility (movie)
Sesame Street
Seven-Up candy bar
Sharpie
Shop-Vac vacuums
Silly Putty
Sim City
Simply Pure Orange Juice
Sims
Sin City (movie)
Singer
Singer
Sit N Spin
Sixteen Candles (movie)
skeleteens soda
Sketchers
Skip It
Sky-Way
Slap Shot
Slap Ya Mama cajun seasoning
Sleeping Beauty
Slice
Smells Like Teen Spirit
Shampoo
Snickers
Snow White and the Seven Dwarfs
Soft Batch cookies
Sony
Sound of Music
Speedo
Squash
Staples (office supply store)
starbucks
Stash Tea
Stay Puft Marshmallows
Steak n shake
Steiff
Stella Doro Italian Cookies
Steven Spielberg
Stingray (bicycle)
stoFflurs macaroni and cheese
Stouffer's Lasagna
stove top stuffiNg
Subway restaurants
Sugar Smacks
Sunny Delight
Surge
swanson chicken broth
Sweet Tarts
Swenson Foods
Swiss Miss extra marshmallows
tapioca
Tastycake
Team Flakes
Terminator 2: Judgement Day
Terms of Endearment
the Bible
The Game of Life
The Goonies
The Grinch Who Stole Christmas (animation)
The Hobbit (book)
The Labrynth
The Lord of the Rings
The Man from Uncle (TV show)
the point
The Sanitary Tortilla Factory
The Sound of Music
The Wedding Singer
Thomas the Tank Engine
Thunderbird car
Tiffany's
Tiger Asics sneakers
Tillamook Cheese
Time-Life
Tobasco
tOlfay
Tofutti
Tommy Armour Golf Clubs
Tonica
Top Ramen
Topps
Tostitos Chips and Dips
Totino's
tpx
trader joes asian carrots
trapper keeper
Trix cereal
Tunies
Twinnings Tea
Twister (game)
TY (stuffed animals)
U2 Music
UHF
UNCLE BEN'S RICE
Uno
vanilla pepsi (regular not diet)
Veganaise
Verizon
Victoria's Secret
Vlasic Pickles
Voltron
Volvo
Wade's Market
Walt Disney movies
Warheads
Welch's
Wendy's fast food restaurant
Wet and Wild
Whammo
When Harry Met Sally
White Christmas
WOLLMEISE
X-Box
X-Men
Yuengling
Zapps
Zataran's
Zataran's
Zebra
Zebra stripe bubble gum
Zelda video games
Thank you for agreeing to participate in my research study. Today I want to talk with you about two brands, Lucky Charms cereal and a brand from your past that you are nostalgic for. I’m interested in learning a few things from you including what you think of when you think of the cereal but I’m also interested in learning about how your mind gets you there. As you answer the following questions, please feel free to tell me everything you’re thinking, even if it seems silly or unrelated. As you can see, I am making an audio recording of this conversation. This is being done so that we can talk without me worrying about writing down what you are saying. Are you okay with this conversation being recorded?

Q1: Please describe to me you think of when I mention Lucky Charms cereal?

Q2: What are your general feelings about Lucky Charms cereal?

Q3: Please tell me about the product attributes or characteristics that come to mind when you think about Lucky Charms cereal. For example, many people have mentioned that Lucky Charms is a cereal usually eaten by children.

Q4: Do you have any specific memories of eating Lucky Charms cereal? Please, tell me your stories.

Note: The above questions will possibly be followed by probing questions such as:

1) Tell me more about X.
2) What did you mean when you said X?
3) Could you please elaborate on X?
Appendix 5

Brand Change Suggestions – Lucky Charms Cereal

Package cereal in bag instead of box
Change mascot from Lucky the Leprechaun to Bridget the Banshee
Change mascot from Lucky the Leprechaun to Seamus the Snake
Change mascot from Lucky the Leprechaun to Saint Patrick
Sell in small, single serving bags in vending machines (no milk)
Remove “shapes” from marshmallow charms…make them all the same shape instead
Change tag line from “They’re magically delicious” to “They’re yummy and good for you”
Change color of the box from red to green
Use only organic ingredients
Make the cereal pieces green
Change the name to Whole Grain Lucky Charms
Change the color of Lucky’s outfit
Dress Lucky in jeans and a t-shirt
Dress Lucky in football gear (Fighting Irish)
Warning labels re: childhood obesity (think new cigarette labeling)
Change commercials to show adults eating Lucky Charms as a dessert
Live action commercials
A Lucky the Leprechaun cartoon on Saturday mornings (or a movie)
Lucky Gnome, Gremlins, Fairies, Groundhog, Elves, dinosaurs. (Change the spokes-character)
Give the cereal a German/Spanish/Italian theme, rather than Irish
Make Gluten Free
Appendix 6
Images of Manipulations – Study 1

Stimuli – Study 1

Low Change

Moderate Change

High Change
Appendix 7

Brand Change Suggestions – Lucky Charms Cereal

Mickey Mouse –

- Change voice - http://www.youtube.com/watch?v=mov82tGxFY
- Change clothes (jeans, t-shirt)
- Make new movies with Mickey

Oreo –

- Change shape (make square, easier to dunk)
- Triple stuffed!
- Themed Oreos (sports teams or cause related)
- Sugar Free (Splenda Oreos)
- Stuff-your-own Oreos
Appendix 8
Images of Manipulations – Study 2

Stimuli - Study 2

Low Change  Moderate Change  High Change
References


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