

THESIS

A BEWITCHING SEMBLANCE OF SOMETHING TO BE DESIRED: ADVERTISING
NOSTALGIA AND PRODUCT INVOLVEMENT'S RELATIVE INFLUENCE ON
ATTITUDES AND PURCHASE INTENT AMONG YOUNG ADULTS

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ABSTRACT

A BEWITCHING SEMBLANCE OF SOMETHING TO BE DESIRED: ADVERTISING NOSTALGIA AND PRODUCT INVOLVEMENTS RELATIVE INFLUENCE ON ATTITUDES AND PURCHASE INTENT AMONG YOUNG ADULTS

Despite the recent rise of advertisements employing nostalgia, relatively few previous studies have investigated the effectiveness of nostalgic messages, especially as they might be applied to promote high- versus low-involvement products. Previous research has broadly conceptualized nostalgia without focusing on product-related or associational claims. This research used associational nostalgia where the nostalgic themes presented in the advertisements were not directly related to previous product usage.

A quasi-experiment involving a convenience sample of undergraduates (n=201) in a large classroom setting was used to compare the effects of nostalgic versus non-nostalgic messages in ads for a fictitious high involvement product (laptop computer) and a fictitious low involvement product (paper notebooks). Participants were randomly assigned to one of four experimental conditions and read a single ad. Product knowledge for laptops and notebooks (and two distractor products) were measured in a pretest questionnaire; dependent measures in the posttest results were measured in terms of three dependent measures: attitude toward the ad, attitude toward the brand, and purchase intent. Additionally, because previous research has yet to determine how nostalgic advertising is most likely to be cognitively processed, open-ended cognitive response items were also included to further investigate the type of processing that is most frequently occurring. Gender was included as a possible moderating variable.

The results provide mixed support for the hypothesized relationships between product involvement and nostalgic advertising themes. Findings suggest that females are particularly responsive, in terms of attitude toward the ad and attitude toward the brand, to associational nostalgic claims for the low involvement product (notebooks). Cognitive response-thought listing results suggest that when the primary thought elicited from the advertisement was nostalgic in nature, other references to the product or the ad itself decreased. Implication and practical considerations for content creators in advertising as well as future research suggestions are also discussed.

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CHAPTER ONE

INTRODUCTION

At its most fundamental level, advertising can be defined as “a paid, mass-mediated attempt to persuade” (O’Guinn, 2009, p. 9). Much of modern advertising relies on creating an association between the product and an already held emotion or feeling that may or may not be directly linked to the product (Fallon & Senn, 2006; Reisenwitz, Iyer, & Cutler, 2004) or to positive cultural values (Campbell, Martin, & Fabos, 2013). Association, in this case, means a strategy of communicating through symbolism (Moriarty, Mitchell, & Wells, 2012). By using this persuasive communication technique, advertisers are able to create connections between the product and desirable characteristics that “cue the brand’s image and personality” (Moriarty, Mitchell, & Wells, 2012, p. 115). Contemporary advertising uses this to break through a cluttered marketplace in hopes of creating connections between the product and long-term memory structures to be recalled later when the product is encountered (Peter & Michael, 2004). One of the tropes that permeate this form of commercial speech is nostalgia or an emotional sentiment to the past (Baker & Kennedy, 1994).

Certain product categories lend themselves to nostalgic advertising based on either previous usage with the product itself, or what the product enables consumers to do can itself be tinged with nostalgia. For example, Kodak ads frequently use nostalgic themes and photographs of the past in hopes of underlining the benefits received from purchasing a Kodak camera, or up until the mass adoption of the digital camera, film. This form of messaging enforces that memories are precious and consumers should use and trust Kodak to capture and preserve those moments (Sujan, Bettman, & Baumgartner, 1993). In this example, the product itself and its benefits are directly tied to nostalgia because of what the product offers consumers. It is not

difficult to make the “associational leap” from capturing pictures of a graduation or a child’s birth to feeling nostalgic about those moments in the future. Kodak has brilliantly communicated the core benefits of its products and connected them to consumers in a way that resonates and reflects those benefits in a tangible and intangible way; a Kodak camera provides consumers the ability to time travel.

In the case of Kodak, the company is selling a benefit that consumers may not fully appreciate until years later. The pictures and memories that are captured become important later in life because of the fleeting nature of important moments. Kodak has been able to connect to consumers in a powerful way through a common human condition of wanting to preserve important life events. Kodak need only present a nostalgic trope in its advertisements and allow consumers to fill in the moments that are personally important to them, thus making the connection salient and Kodak becomes essential to the process.

Recently, Samsung Electronics Co., Ltd. introduced a new, wearable form of personal mobile device in what it has named “Gear.” This form of mobile technology resembles a watch more than it does a traditional mobile phone or tablet. Ads were developed for this product launch that, as of now, feature two similar strategy ads: “Evolution” and “A long time coming.” In both of these ads, pop culture references are made between the Gear and previous conceptions of what this technology will look like in the future, how it will function, and how it will be used. From Star Trek to the Power Rangers, these ads invite consumers to take a nostalgic glimpse into the past to when this technology was only viewed through the lens of futuristic aspirations. Consumers who remember these pop-culture references, and can relate to a time when this technology was seen only as a futuristic gadget, are invited to take a journey back in time. Only three days after being uploaded to YouTube, these ads had gone viral and had close to 4 million

views. Some of this popularity could be explained by the introduction of a new, exciting technology or it could be viewed as a win for nostalgic advertising.

In this sense, Scott (1994) argues that advertisements should be treated as a symbolic, abstract form of messaging similar to words rather than as a sensory analogue that is processed with little cognitive effort. Advertising is not concrete. It is a form of abstract communication that can be processed at many levels (Scott, 1994) with varying degrees of cognitive effort and elaboration (Petty & Cacioppo, 1979, 1990). The specific relationship under investigation in this study was the influence of nostalgic advertising and self-referencing, in tandem with varying levels of product involvement, on attitude and behavioral intent.

From the above examples, nostalgia has been used in a variety of ways, across varying products and degrees of product involvement among consumers, to sell and promote the use of those products. Recently, research has begun to investigate the mediating role nostalgia might play in terms of advertising message processing, how to induce nostalgic self-referencing, and the outcomes of such processing. These studies have added to a body of research that suggests that nostalgia, and self-referencing of nostalgic memories, can have a positive impact on advertising message processing. What previous research has yet to address is the interaction between nostalgic advertising and products with either high or low levels of consumer involvement. This study sought to add to this growing area of advertising research by addressing the issue of including product involvement and nostalgia as independent variables that could have an impact on message processing and thus, attitudes and behavioral intent.

RATIONALE

This study could have important implications for both academic researchers and content producers. Much of the past research surrounding involvement has investigated its antecedents

(Greenwald & Leavitt, 1984; Slater, 1997; Celsi & Olson, 1988; Johnson & Eagly, 1989, 1990; Kyle, Absher, Hammitt, & Cavin, 2006), but previous research has largely neglected nostalgia and product involvement together in relation to dependent variables. This study sought to add nostalgia as a content variable that could impact message processing in relation to product involvement and attitude, which could lead to further research regarding its effects on the cognitive processing of persuasive communication.

Further, the relationship between nostalgia and product involvement can have a significant impact on persuasion and elaboration of both high-and low-involvement products (Muehling & Pascal, 2012). It is typically theorized that as involvement levels increase, elaboration of the message is also likely to increase (Petty & Cacioppo, 1990). Within this dynamic, persuasion, part of the psychological principles relating to a symbolic process of attempting to change current perceptions or behavior (Perloff, 2014), has been posited to decrease because of the way information and the message are scrutinized under high levels of elaboration (Petty & Cacioppo, 1990). By investigating nostalgic advertising as an influence on message processing, this study sought to explore the interaction between this form of self-referencing and outcomes related to the attitude toward the ad and brand, and purchase intent. Specifically, does this form of messaging increase elaboration and spark the activation of long-term memory and what effect will this relationship have on persuasion outcomes (attitudes and behavioral intent) across high-and low-involvement products? Given these variable dynamics, this study aimed to fill the gap between viewing product involvement and nostalgia separately by combining both them to measure outcomes of their relationship.

If nostalgic-themed advertisements can increase attitude towards the ad, the brand, and purchase intention in both high-and low-involvement products, advertisers will have another way

to present advertising messages by tapping into already existing constructs within young adults' stored memory and relate that nostalgic information to the product. This may be particularly important for low involvement product categories due to the very nature of low involvement products; they are seen as unrelated to the self (Zaichkowsky, 1986). If nostalgia is found to have a positive influence on attitudes and purchase intention for low involvement products, consumers may be prompted to self-reference, through autobiographical memories, to create perceived personal connections to the product and increase elaboration (MacInnis & Price, 1987).

OVERVIEW

This thesis is separated into four chapters: literature review, methods, results, and discussion. Chapter Two's literature review examines the variables in this study (see Figure 2.1). Nostalgia, as a construct, was reviewed from its etymological roots in clinical psychology and medicine, to present its conceptions related to advertising research and professional practice. Involvement was introduced as another multi-dimensional construct for this study. Previous involvement research related to these variables that are posited to mediate persuasive message processing were reviewed to provide a comprehensive understanding of the definitional and operational approach to product involvement and personal nostalgia in terms of advertising research. Dependent measures are also outlined and presented in relation to previous research and theoretical approaches to defining and measuring these concepts. Mediating variables, including gender and product knowledge, were also introduced and discussed in terms of the possible mediating effects they may have on message processing. Concluding this chapter, research questions and hypotheses are introduced and qualified in accordance with previous research findings and future suggestions.

Chapter Three outlines the methodology used for this study including design, subjects, stimulus, measurement, and data analysis. The quasi-experimental design of this study followed current trends in this area of advertising research and these trends were considered in order to add knowledge to this area using a commonly accepted structure.

Chapter Four presents the study's findings, including descriptive statistics for the measures and the results for the four hypotheses tested.

Chapter Five discusses the supported and unsupported hypotheses, surprising and unexpected findings, implications for research and for practitioners, strengths of the study, limitations of this research, recommendations for study improvements, and future research suggestions. Under each of these categories, current and past research was used to provide context for some of the findings.

CHAPTER 2

REVIEW OF LITERATURE

The following literature review focuses on the variables in of focal interest in this study: personal nostalgia, product involvement, product knowledge, attitude toward the ad, attitude toward the brand and purchase intent (see Figure 2.1). Due to construct dynamics and interactions, these variables are often discussed in tandem and in relation to each other in academic research. Outside research aside, the primary goal of this review is to define, explicate, and operationalize these variables separately. Included in this review are theoretical perspectives and models that integrate these variables in hopes of analyzing any known interaction between them.

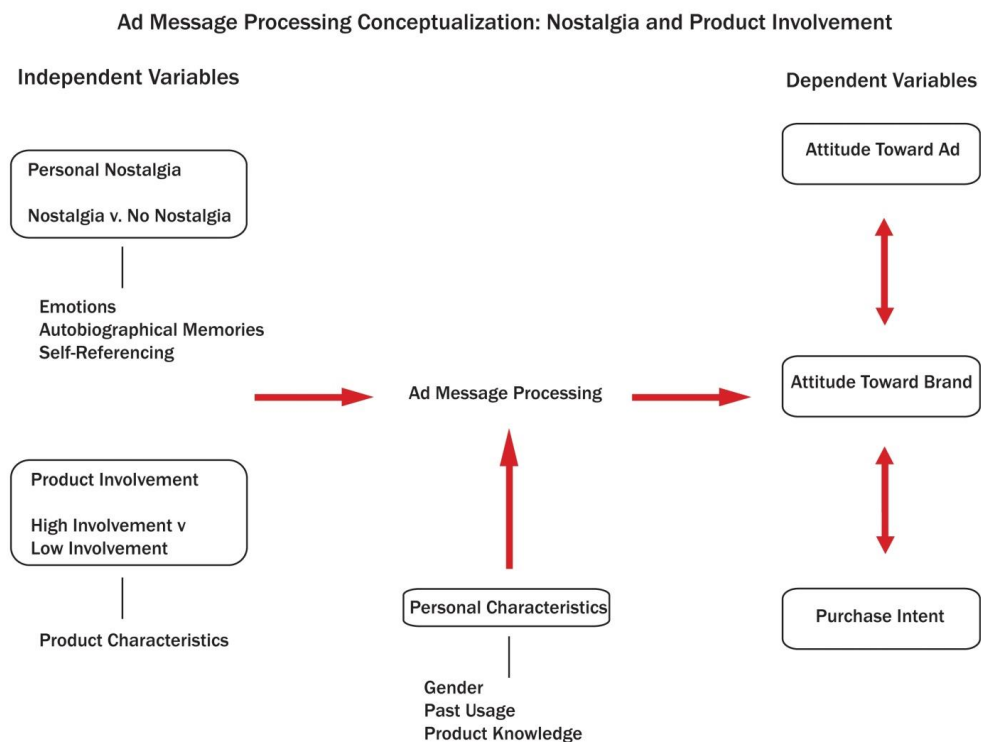


Figure 2.1: Study Framework

NOSTALGIA

The word nostalgia has its etymological roots in two Greek words, yet it did not originate in ancient Greece (Boym, 2001): *notos*, meaning return home, and *algos*, meaning pain. During the late 17th century, Johannes Hofer coined the present conception of the term in his 1678 dissertation by combining modern Latin with *Heimweh*, a German word meaning homesick, to the present term nostalgia. Johannes Hofer was the first researcher to describe nostalgia as a clinical condition (Stern, 1992; Havlena & Holak, 1991). Hofer and others (McCann, 1941) have researched and treated nostalgia in relation to psychological medicine. McCann (1941) compiled a literature review of nostalgia research from J. Hofer to the early 1940s and concluded that until the middle of the 20th century, it was primarily defined and operationalized as a medical condition with serious consequences if left untreated.

Beyond its etymological roots, philosophical conceptions of pain and homesickness, and clinical psychological symptoms and behavior, it is important to note that from a cognitive and neurological perspective (Hirsch, 1992), humans have no choice but to live imperceptibly in the past. Research has shown that what the brain perceives as “now,” the newest moment in time, can never truly be experienced because of the way our brain processes information and external stimuli (Eagleman & Sejnowski, 2002). In the most general terms, it takes a very short period of time for the human brain to process information from when it actually happened to when the brain perceives the information and people acknowledge its existence. For instance, Eagleman and Sejnowski (2002) conducted research regarding this “time lag” between seeing and perceiving information. Using a test called the “Flash Lag Effect,” Eagleman and Sejnowski (2002) demonstrated how our perception of sight is based on the time it takes for our brain to process what we are seeing. From this research, it has been discovered that humans live around

80 milliseconds in the past. Again, this is a very short period of time but it should be noted that our brain has no cognitive way of knowing or living anywhere but slightly in the past (Stevens, 2012). Taking this a step further, humans can live or visit places and emotions further in the past, where they relive memories and experience emotional connections to something that could have happened years ago.

Fred Davis (1979), a sociologist who has spent much of his career operationalizing and defining nostalgia, defines nostalgia as a longing for a previously experienced past or “yearning for yesterday” (Holbrook & Schindeler, 1991). Stern (1992) defines nostalgia as “an emotional state in which an individual yearns for an idealized or sanitized version of an earlier time period” (p. 11). Other social scientists, including sociologists and psychologists, have researched, operationalized, and defined nostalgia in much of the same way and for a much longer period of time than marketing/advertising researchers; thus, many of the techniques and terminology in defining nostalgia are borrowed from earlier works in these well-established fields.

Nostalgia in Advertising

At the most general level, nostalgia in advertising is seen as a bittersweet experience through which times, places, and emotions of the past are revisited through messaging manipulations that encourage referencing of the past (Baker & Kennedy, 1994; Batcho, 1995; Braun-LaTour, 2007; DaSilva & Faught, 1982; Havlena & Holak, 1991; Merchant & Rose, 2013; Meyers, 2009; Pascal, Sprott, & Muehling, 2002; Schindler & Holbrook, 2003; Sujana, Bettman, & Baumgartner, 1993; Wildschut, Sedikides, Arndt & Routledge, 2006). From this commonly accepted definition, current research is focused on nostalgia in terms of time, whereas historically it was thought of in terms of place (Meyers, 2009). Contemporary advertising messages and advertising researchers are focused on transporting people to different times and

less focused on other factors relating to previous conceptualizations of the construct in terms of distance from home or being displaced physically from a desired location (Meyers, 2009).

Aside from several studies and researchers who have suggested that, in certain instances, nostalgic thoughts evoked through advertising are not always positive (Muehling & Sprott, 2004; Holak & Havlena, 1992), the majority of nostalgic advertising research has shown positive correlations between attitude toward the advertisement, attitude toward the brand, and likelihood of purchase (Braun-LaTour, 2007; Pascal, Sprott & Muehling, 2002; Meyers, 2009; Baker & Kennedy, 1994; Sultan, Muehling & Sprott, 2010; Muehling & Pascal, 2012; Braun, Ellis & Loftus, 2002; Muehling, 2013). This, in part, could be due to the contention that nostalgic memories are typically viewed as an idealized version of the past, where the processing is selective in nature (Pascal, et al., 2002). From an advertising perspective, it is thought that if brands can connect with those positive emotions of an idealized past, the brand can benefit through association (Braun-LaTour, 2007; Perkins & Forehand, 2012). This contemporary style of advertising moves beyond a direct-sell approach to an associational approach where memories can be looked at symbolically rather than literally (Meyers, 2009; Braun-LaTour, 2007).

The crux of this style of advertising is the belief that the advertised products and brands contain deeper, second-level meanings beyond traditional, tangible benefits. “Nostalgia is often used to help us not only connect with our past, but define ourselves in the present” (Pascal, et al., 2002, p. 40). This process of identifying “self” through associations from previous experiences is commonly used in advertising. Modern advertising creates an idealized image that invites consumers to identify themselves through connections with brands and products (Campbell, Martin, Fabos, 2012). From this perspective, nostalgic tropes seem like a perfect fit for advertising because from an advertiser’s perspective, people buy products to realize desires and

aspirations. Nostalgia can serve as a benchmark for consumers to understand where they have been in relation to where they can be by incorporating a certain brand or product into their lives (Meyers, 2009).

It is typically presumed that nostalgic advertising attempts will be more effective when presented to older adults. The primary reason for this assumption is that older adults have more life experience and a greater number of collected memories to self-reference. Aside from the gap between the number of stored memories from younger to older adults, research has suggested that nostalgic claims may work in the midst of turmoil or great life change (Meyers, 2009). Evans, Forney, and Guido-DiBrito (1998) apply Chickering's theory of identity development (Chickering & Reisser, 1993) to college-life transition and suggest that managing emotions and establishing an identity are particularly important in this transition. Nostalgia serves a primary role not only in providing a reference to the past, but also provides context and helps form opinions of the world today (Meyers, 2009). Given these theoretical claims, this study specifically chose young adults to test the proposed messaging claims. There is a discrepancy between what age groups nostalgic advertising would theoretically be most applicable and influential toward and what generational literature and life-change literature suggest. Due to the desire among marketers to reach and persuade this age group, understanding their responses to nostalgic advertising in high-and low-involvement products will not only add to the current research regarding this topic, but also provide some insight into this age group's attitudes toward this contemporary style of advertising.

Multidimensional Construct: Historical and Personal Nostalgia

The general conception of nostalgia as a bittersweet experience from revisiting the past (Braun-LaTour, 2007; Pascal, Sprout, & Muehling, 2002; Meyers, 2009; Wildschut, Sedikides,

Arndt & Routledge, 2006; Davis, 1979; Baker & Kennedy, 1994; Sujan, Bettman, & Baumgartner, 1993; Havlena & Holak, 1991; Batcho, 1995) has been further investigated and differentiated between two types of nostalgia that dominate sociology and advertising research: *historical/simulated nostalgia* and *personal/real nostalgia* (Stern, 1992; Baker & Kennedy, 1994; Holak & Havlena, 1992; Havlena & Holak, 1991; Batcho, 1995; Hirsch, 1992) (see Table 2.1). Aside from the sociological contribution in differentiating forms of nostalgia, advertising researchers have found it pertinent to separate nostalgic appeals because of the varying consumer responses and behaviors as a result of varying treatments (Marchengianai & Phau, 2010).

In a seminal study detailing two taxonomies of nostalgic advertising, Stern (1992) describes two distinct trends in advertising concept and execution of nostalgic tropes (see Table 2.1). The first, historical, is marked by a desire to return to a time in the past that is viewed as being superior to the present (Stern, 1992). Baker and Kennedy (1994) and Marchegiani and Phau (2010) have similar definitional approaches to historical nostalgia with the caveat being the past that is longed for was not actually experienced by the person. That is, this form of nostalgia is experienced indirectly through the eyes of another (Holak & Havlena, 1992).

Personal nostalgia (Stern, 1992), or real nostalgia (Baker & Kennedy, 1994), refers to a yearning for an experienced past. The most important characteristic of this nostalgia classification is the vivid recollection of one's own past (Stern, 1992). As an association, personal nostalgia has been frequently used in advertising campaigns and consumer behavior research because of its theorized link between already held emotions, beliefs, experiences, and the product/brand itself (Muehling & Pascal, 2012). This personal link is posited to be greater than historical nostalgia because of the self-reflective and highly personal, lived nature of the associations (Muehling, 2013; Ford & Merchant, 2010). For these reasons, personal nostalgia is

the focus of the remaining review, as well as further design implications, operationalizations, and methodology.

Table 2.1 Differentiating Historical and Personal Nostalgia

Nostalgia Components	Historical/Simulated	Personal/Real
Literary Antecedent	Historical Romance	Sentimental Novel
Setting	Exotic Long Ago Far Away	Familiar Home and Hearth
Plot	Quest Linear Goal-Oriented	Birth/Rebirth Cyclical Return to Womb
Action	Adventure Fantasy “Fairyland” Wonders	Realistic Story Lifelike Incidents
Characters	Idealized Aspirational Role-Models	Real-Life Recognizable Ordinary People
Values	Heroic Ones Courage, Honor Mercy	“Everyman” Ones Love, Security Nurturance
Tone	Melodramatic Exaggerated	Sentimental Tearful
Perceiver’s Mental Process	Imagination	Memory
Perceiver’s Response	Empathy Bonding with an “Other”	Identification Development of Self-Image

Personal Nostalgia

It is important to give context to the construct of personal nostalgia in advertising in terms of it being a rhetorical trope prior to a review of previous studies and operationalizations. In rhetoric, an argument presented in a figurative form is called a *trope* (Scott, 1994). This form of language is normally reserved for text and word-based communication where the goal is to reorient information in a way that the presentation invites users to think about a topic in a new

and creative way (Scott, 1994). As a form of persuasive messaging, nostalgia embedded within advertising messages serves as a trope both in terms of textual-based components of the ad, but also in terms of engaging symbolic referencing of autobiographical memories through message processing. An important perspective within this introduction of nostalgia as a trope in contemporary advertising is to consider it as an abstract concept. Thus, varying interpretations are possible across varying populations and from person to person (Ford & Merchant, 2010). The trope embedded in the ad is abstract by itself but becomes “concrete.” In this case, concrete refers to a direct association between a concept and the self, to the individual when it is related to long-term episodic memory. For example, the concept of a first kiss or a graduation party would be considered abstract; these concepts mean different things to different people. But when that abstract concept is self-referenced, autobiographical memories aid in making the concept concrete by applying related knowledge structures and giving the concept context.

The actual memory evoked, specifically the importance of the memory, is a moderating factor in message processing and outcomes (Ford & Merchant, 2010). The authors advised message creators to consider the importance of the memory evoked to be a key factor in encouraging self-referencing of nostalgic, autobiographical memories. From this perspective, it is not enough to simply refer to the past, or to ask consumers to conjure up memories of the past; the messaging needs to be more specific in that it should encourage self-referencing of an important memory.

In relation to personal nostalgia as an autobiographical memory retrieved through self-referencing, Escalas and Krishnamurthy (1995) define self-referencing as “relating a stimulus to one’s self related knowledge structures” (p. 340) and explain it occurs with “ambiguous stimuli and under conditions of mental simulation and activating autobiographical memory” (p. 341).

Sujan, Bettman, and Baumgartner (1993) proposed a similar definitional approach in that self-referencing is the process in which autobiographical memories are retrieved. Escalas and Krishnamurthy (1995) go on to state that self-referencing has been shown to influence recall of stimulus materials. Within this line of research, it has also been found that self-referencing decreases the number of counterarguments, has a positive effect on favorable attitudes, and prompts more favorable behavioral intentions (Escalas & Krishnamurthy, 1995). In the present study, self-referencing can also be viewed in terms of message elaboration.

Escalas & Krishnamurthy (1995) have described self-referencing as an independent variable that increases message processing and elaboration. In the case of personal nostalgic tropes in advertising, autobiographical memories and self-referencing are posited to enhance message processing. Referring to Escalas & Krishnamurthy (1995), the power of nostalgia advertising to tap into consumers' autobiographical memories and self may be explained in several ways: According to Muehling and Pascal, 2012, p. 113, "the self-relevant information is intrinsically interesting and therefore, capable of attracting more attention and prompting greater cognitive effort and self-referencing increase the availability to complex and integrated memory structures to which new information can be related."

Price, Axsom, and Coupey (1997) conducted research to examine the degree to which the process of self-referencing during ad exposure affects persuasion. The authors found that self-referencing of autobiographical memories increases self-focus and encourages a schema-based processing. Related to the present study and message presentation, Price, Axson, and Coupey (1997) found that encouraging self-referencing can be effective in advertising communication, but suggest that the tropes presented should be kept at an abstract level to encourage consumers to relate what is presented to their autobiographical memories. Essentially, the authors caution

against being highly specific to encourage and allow the viewer to elaborate on the message based on specific memories that are deemed important and relevant.

Certain product types or classes appear to be better suited for personal nostalgia referencing. Stern (1992) suggested that for personal nostalgia to be most effective, claims associated with “cocooning” or “nesting” products that provide the “benefit of comfortability” (p. 19) appear to be tailored for this type of messaging. Aside from Stern (1992), little research has been done concerning what product categories best fit into personal nostalgia. Arguments could be made that, given a particular situation or product, a number of personal nostalgic connections could be made from the product to the consumer.

The majority of research regarding personal nostalgia and advertising uses nostalgia as an independent variable that is posited to act as an antecedent to elaboration, message processing, and involvement (see Baker & Kennedy, 1994; Braun, Ellis & Loftus, 2002; Meyers, 2009; Muehling, 2013; Muehling & Pascal, 2012; Muehling & Sprott, 2004; Reisenwitz, Iyer & Cutler, 2004; Sultan, Muehling, & Sprott, 2010). From an applied perspective, it is understandable why advertisers and researchers are primarily focused on nostalgia as an antecedent, rather than as an outcome of message processing, because much of advertising research is concerned with how messages affect message processing, and more importantly, the resultant outcome of that processes (i.e., purchase intent or attitudinal change). Current research suggests that nostalgia is “intensely personal and that its greatest influence may be for current brand users who have an enduring personal attachment with the brand they used during childhood” (Sultan, Muehling, & Sprott, 2010, p. 1).

In an exploratory study, Braun, Ellis & Loftus (2002) investigated nostalgia’s ability to alter perceived and actual childhood memories of people exposed to a specific advertising

stimulus. This exploratory research concluded that autobiographical referencing can lead to the creation of false or distorted memories. Specifically, the researchers were able to implant false memories, immediately following exposure, in the respondents by manipulating nostalgia levels contained in the advertising stimuli. From this research, many advertising researchers have focused on the possible implications as a result of the autobiographical referencing found in nostalgic advertisements. Researchers and scholars have tested and hypothesized about the outcomes of such referencing in terms of direct advertising application (dependent measures: Attitude toward Ad, Attitude toward Brand, and Purchase Intent).

In another exploratory study, Pascal, Sprott, and Muehling (2002) studied the influence of evoked nostalgia on consumer responses to advertisements. Results indicated that nostalgic advertisements increased the liking of the ad and the brand, in addition to increasing purchase intention. This study included two well-known brands (Kodak and Toshiba) and “control” or “filler” ads were included to prevent hypothesis guessing. This exploratory study called for more research to be done concerning products that evoke nostalgic thoughts, if unknown brands would have similar results, and whether nostalgia effects are similar across varying age groups.

At this point in the review, autobiographical memories and personal nostalgia need to be conceptualized in relation to each other. Autobiographical memories are past personal experiences (Sujan, Bettman, & Baumgartner, 1993), similar to personal nostalgia but do not inherently require memories to be tinged with nostalgic feelings or emotions; personal nostalgia is an autobiographical memory but not all autobiographical memories contain personal nostalgia. For this study’s discussion of autobiographical memories and personal nostalgia, the two will be used interchangeable in assuming the autobiographical memories that are elicited contain personal nostalgia.

Personal nostalgia is also used in advertising practice and research stimuli due to its hypothesized positive effect on message processing (Muehling & Pascal, 2012). Through message processing theories, such as the Elaboration Likelihood Model, research has shown that as independent variable embedded within the advertising stimulus, nostalgia increases elaboration and the perceived number of personal connections between the brand and the respondents (Braun, Ellis & Loftus, 2002; Greenwald & Leavitt, 1984; Muehling & Sprott, 2004). Muehling & Sprott (2004), in an early study in the area of nostalgia and consumer involvement, concluded that evoking nostalgic thoughts and personal reflection in relation to the advertised product may be an effective way to communicate brand positions and persuade consumers; “making consumers yearn for yesterday may be an effective strategy to get them to yearn for the advertisers goods as well” (p. 33).

Similarly, Muehling (2013) and Muehling and Sprott (2004) found that, as compared to non-nostalgic ads, advertisements that feature tropes of personal nostalgia produced far more favorable brand attitudes than non-nostalgic ads. Little research has been done comparing specific competing tropes (humor vs. nostalgia) and at this point has limited the focus to understanding the cognitive effects and outcomes of nostalgia rather than comparing its effectiveness in relation to other common advertising themes.

Muehling and Pascal (2012) conducted research concerning nostalgic advertising and a neutral involvement product (a Foton brand camera). This research purposely used a neutral product, in terms of consumer involvement level as measured on a 7-point Likert scale where a pilot study ranked cameras in order of involvement, because they were interested in the involvement outcomes as a result of manipulating the presence/absence of nostalgia in the advertisements. Muehling and Pascal (2012) found that at the time of advertising exposure,

nostalgia may serve to increase involvement and elaboration with the advertisement. All of the dependent measures (attitude toward ad, attitude toward brand, and self-reported involvement) revealed a positive relationship with the nostalgic manipulated ad. This research suggests that “nostalgic influences are capable of enhancing consumer’s involvement with advertising and generating more favorable impressions of the ad sponsor” (Muehling & Pascal, 2012, p. 112).

In addition to nostalgic advertising’s effects on dependent measures and message processing, research has also been done in terms of narrative tropes and message processing. Slater & Rouner (2002) found that when a narrative form of communication is prompted through story, counter arguing decreases. While this study was done in an entertainment education context, it could be suggested that self-referencing narratives could have similar effects. The main difference between the two forms of narratives is one is directly prompted by the messaging strategy and one is referenced in long-term memory.

Up to this point, little research has been done investigating both high and low involvement products and nostalgic tropes as independent variables to advertising message processing. Research has shown that nostalgic tropes can increase involvement with a neutral product (Muehling & Pascal, 2012) and have been shown to influence message processing (Braun, Ellis & Loftus, 2002; Muehling & Pascal, 2012; Reisenwitz, Iyer & Cutler, 2004; Sultan, Muehling, & Sprott, 2010). However, research has yet to fully investigate the differences in high- and low-involvement products when nostalgic advertising tropes are introduced. For the purposes of this study, personal nostalgia was investigated in conjunction with product involvement. The nostalgic theme present in the experimental advertisements were considered an “abstract” concept (MacInnis, & Price, 1987) and through self-referencing of autobiographical memories it was posited to become concrete (MacInnis, & Price, 1987).

Associational or Product-Related Nostalgia

Meyers (2009) remarked that advertising, by its very nature, cannot address individual needs, wants, and yearnings. In advertising and its approach of segmentation, audiences are grouped based on various demographic and psychographic characteristics that essentially reduce the highly complex (individuals) to averages in an attempt to reach as many like-minded people as possible. Given this contradiction, advertisers, when incorporating nostalgic themes, also take a similar approach to message creation; ads “either appropriate common nostalgic themes or construct them” (Meyers, 2009, p. 737).

In relation to this study and its focus on nostalgic advertisements and product involvement, there are two ways to approach the construction of nostalgia: through direct, product-related memories or through purely associational means where a theme is embedded within the ad that may not have direct previous usage connection or connotation to the product. For product-related nostalgia, an example would be presenting information in a way that invites the user to reminisce about a time or place the product was personally used. This execution is commonly used in product advertising where there is extensive history and tradition related to the product (Meyers, 2009). In a purely associational context, an example would be to connect a specific nostalgic yearning or memory to a product that has no implicit connection to the product itself, whether through product features or benefits.

The personal nostalgic tropes presented in this study were not limited to direct past product usage. They were used to link nostalgia to the product indirectly, through association. Through self-referencing and a personal connection to the nostalgic theme, the viewer was posited to create meaning from a concrete connection from the autobiographical memory and transfer that to the product.

Personal Nostalgia as Imagery

In a meta-analysis of the role of imagery processing in marketing communications, MacInnis and Price (1987) synthesized a large body of research relating to imagery processing and elaboration. While the construct of nostalgia is never explicitly mentioned in this study, the authors' description of imagery processing is directly applicable to nostalgia as a form of self-referencing and elaboration. Examples of imagery given in the analysis were daydreams, fantasies, and problem solving. Specifically, MacInnis and Price (1987) outlined two of the dependent measures used for the present study and placed them within the context of imagery and elaboration; elaboration in this sense being "the extent to which information in working memory is integrated to prior knowledge structures" (p. 475).

Regarding purchase intent, the authors offered support that there is a positive relationship between imagery processing and purchase intention, and concluded that imagery processing can be more effective than discursive processing in influencing behavior (MacInnis & Price, 1987). The authors go on to reference studies by Lang (1977, 1979) where it was posited that intentions are influenced only when there is a strong emotional connection to the imagery. MacInnis and Price (1987) acknowledge limitations to this research and suggest that outside of clinical contexts, little research has been done concerning these two variables.

Directly related to the present study, MacInnis and Price (1987) suggest that the effects of self-referenced imagery and purchase intention may be explained in two ways: by the *concreteness of the imagined scenario* and/or by the *greater emotionality*. It is the authors' contention that self-referenced, autobiographical memories of personal nostalgia meet both of these criteria and will have a positive influence on purchase intention.

MacInnis and Price (1987) also cite effects on brand perceptions in their analysis. They concluded that consumers using imagery processing only focus on one brand, decreasing the number of possible counter arguments and the information regarding other possible brands. In this case, brand preference is posited to be positive when associated with imagery processing.

Measuring Nostalgia

Over the past 10 years, marketing and advertising research has dedicated a small portion of its research activities to measure and observe antecedents, cognitive processing, and outcomes of nostalgic advertising, “but research within the context of advertising is perhaps best described as nascent (Muehling & Sprott, 2004, p. 33). Two main suggestions for research have evolved from previous studies. These include calls for the development of relevant scales (Marchengianai & Pau, 2010; Merchant, Latour, Ford, & Latour, 2013) and acknowledgement of nostalgia as a multidimensional construct (Muehling & Pascal, 2012; Muehling, 2013).

Nostalgia scales used in marketing communication include an 8-item nostalgic proneness scale (Holbrook, 1993), the NostScale (Baker & Kennedy, 1994), and the scale of evoked nostalgia (Pascal, Sprott & Muehling, 2002). Each of these scales uses a manipulation check with similar terminology (Ford & Merchant, 2010).

Merchant, Latour, Ford, and Latour (2013) developed a multidimensional scale for personal nostalgia with high external validity. Their success is due to their careful choice of sampling frame in which random samples of participants, across varying ages and other demographic variables, were recruited to develop and test the scale. This scale was developed through both qualitative depth-interviews as well as surveys. This research found four main responses among respondents which included past imagery, physiological reactions, positive

emotions, and negative emotions. Prior to the scale by Merchant and colleagues (2013), researchers had no way to measure personal nostalgia independently of historical nostalgia.

For the purpose of this study, the only personal nostalgia scale used was included as a manipulation check in the pretest of the final booklet and in the final questionnaire that accompanies the experimental manipulation (Appendix: A). These were used to increase the validity of the stimulus manipulation.

INVOLVEMENT

As one of the most studied, measured, and operationalized variables in advertising and marketing research, involvement is considered a key motivational variable in message processing and persuasive communication, and models have been posited such as the Elaboration-Likelihood Model (Petty & Cacioppo, 1979) and the Heuristic-Systematic Model (Chaiken, 1980) to describe how persuasive communication will be processed by individuals. In these models, a key variable in the cognitive processing of persuasive messages is involvement. It is there so much so that, under certain circumstances, “the success or failure of advertisers’ persuasive attempts may depend upon their ability to heighten consumers’ involvement with their advertising creations” (Muehling & Pascal, 2012, p. 106). Involvement, specifically product involvement, has traditionally been viewed and operationalized in advertising research as either high-or low-involvement and often used to segment markets (Bezencon & Blili, 2011). High involvement can be characterized as a higher risk purchase both financially and in terms of consumer satisfaction. Consumers making a purchase decision related to a high involvement product use extended problem solving, are focused on product features and benefits, and normally take more time to reach a decision (Zaichkowsky, 1986). Low involvement products are marked by relatively low cost and consumer risk. The product’s features and benefits are

often indistinguishable from competitors. Purchasing behavior related to this product category is often referred to as “impulse buying” (Hitchon & Thorson, 1995).

Development of Involvement Research

As with most young fields of study, communication research relies heavily on more well-established fields of social science to borrow and modify concepts to suit research needs. The concept of involvement can be traced back to the 1940s in social psychology (Sherif, 1947). During this time in social psychology, involvement was conceptualized as “ego involvement” and it hinged on personal relevance. This is where communication scholars have come to know involvement as being based on personal relevance and this conceptualization embodies the largest overlap between its psychological roots and current communication research.

During the 1960s, there was a surge in research that empirically investigated involvement mainly in terms of involvement’s role as a mediating variable in the communication process. Sherif and Hovland (1961) relied on ego involvement to explain persuasion and the communication process. In their book, Sherif and Hovland noted that higher levels of involvement lead to decreased persuasion (Petty & Cacioppo, 1979, 1990; Chaiken, 1980). This concept plays a key role in social judgment theory (Sherif & Cantril, 1947; Sherif & Hovland, 1961) where it is posited that increasing involvement will lead to greater “latitudes of rejection” (Laaksonen, 1994, p. 3). The idea of high involvement leading to decreased persuasion permeates involvement research to this day (Cameron, 1993).

In a seminal study, Krugman (1965) focused on media and specifically advertisements on television. In this study, Krugman was mainly focused on low involvement. He described involvement as “the number of connections, conscious bridging experiences or personal references per minute that the subject makes between the content of the persuasive stimulus and

the content of his own life” (Krugman, 1965, p. 1). This view of involvement is grounded in the previous operationalization of the concept in social psychology research. Personal connections or personal relevance is at the heart of Krugman’s definition of involvement. Krugman, and others during this time period, (Greenwald, 1965; Sherif & Hovland, 1961) viewed involvement in terms of its role as a mediating variable that needed to be considered regarding persuasive message processing. Across multiple studies, (Bauer, et al., 2006; Bloch & Richins, 1983; Braverman, 2008; Celsi & Olson, 1988; Chaffee & Roser, 1986; Couchen, Lieching & Chongi, 2011; Dardis & Fuyuan, 2008; Gnepa, 2012; Greenwald & Leavitt, 1984; Heath & Douglas, 1990, 1991; Johnson & Eagly, 1989,1990; Krugman, 1965; Mittal, 1982, 1989; Park & Mittal, 1985; Mittal & Lee, 1988, 1989; Petty & Cacioppo, 1979, 1990; Petty, Cacioppo & Goldman, 1981; Pfau, 1994; Quick & Heiss, 2009; Salmon, 1986; Sherif, 1947; Slater & Rouner, 1996a, 1996b; Slater, 1997,2002a, 2002b; Zaichkowsky, 1984, 1985, 1986, 1987, 1994) researchers have shown that the level of involvement influences message processing and outcomes of message processing.

Involvement hinges on the idea that the “level of involvement with an object, situation, or action is determined by the degree to which s/he perceives that concept to be personally relevant” (Celsi and Olson, 1988, p. 211). This deals directly with how the persuasive message is classified by the subject and “the way that a person appraises a communication and perceives its position relative to his own stand affects his reaction to it” (Sherif and Sherif, 1967, p. 129). “Involvement is seen to refer to the strength or extent of the psychological linkage between an individual and a stimulus object” (Laaksonen, 1994, p. 26). This “cognitive grouping” (Laaksonen, 1994) of involvement is largely similar to Sherif and Hovland’s (1961) and Krugman’s (1965) view of involvement in that involvement centers on personal relevance

between the message and the receiver. In regards to product relevance, Petty and Cacioppo (1990) proposed “that where the topic of the message falls on personal importance continuum is more critical for understanding persuasion processes than whether the communication topic is one that deals with important values, goals, people, or objects” (p. 368).

The theoretical framework that dominates nostalgia and involvement research is the Elaboration Likelihood Model (Petty and Cacioppo, 1981, 1986) (ELM: Figure 2.2). The ELM posits that when people have the ability to process messages and their motivation and involvement are high, they are likely to centrally process the stimulus (Petty & Cacioppo, 1981, 1986; Cacioppo, Petty, Kao & Rodriguez, 1986). Central processing is marked by careful message processing where the information is relevant to the receiver.

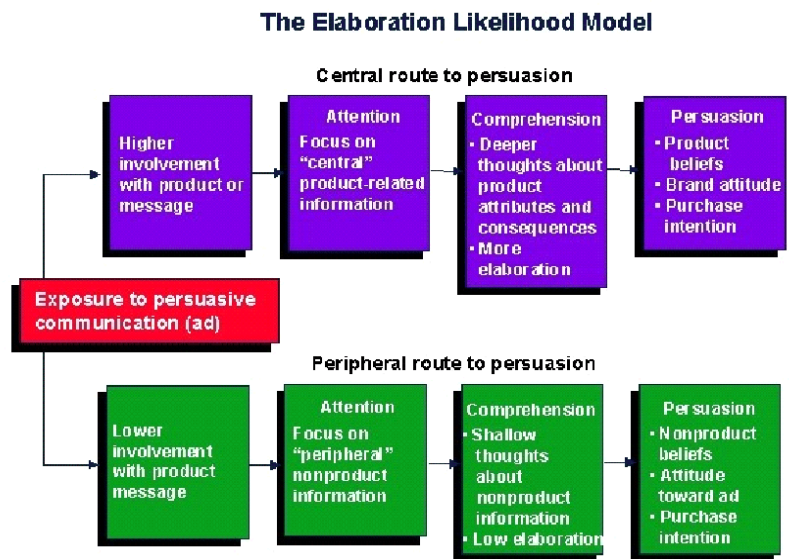


Figure 2.2: Elaboration Likelihood Model (from Gnepa, T.J., 2012, p. 44)

Involvement in the ELM is seen as a mediating variable that influences whether the message will be centrally or peripherally processed. Again, Petty and Cacioppo (1986) use involvement as a variable within the motivational continuum of an individual. They posit that

when involvement is high, this will likely result in the motivation needed to centrally process the message (Petty & Cacioppo, 1986). Peripheral processing is based on short-term cues that can enhance arousal and could lead to eventual central processing of a message (Heath & Douglas, 1990). For low involvement products, it is thought that message viewers will not exert effort to centrally process the message because the product featured has little personal connection or relevance to the self (Hallahan, 2004).

Nostalgia serves an interesting role in this process because, while nostalgia may play a role in message processing for low-and high involvement products, it acts as a symbolic, rather than literal, reference. Pascal, Sprott, and Muehling (2002) have stated that researchers are unsure of whether nostalgia is processed centrally or peripherally. It is posited that autobiographical referencing is less likely to be rejected upon elaboration and increases in involvement because the information that is referenced is relevant and perceptually “true” (Braun, Ellis, & Loftus, 2002). In this case, if involvement levels increase and the message is processed centrally, it is less likely to be criticized and rejected based on the nature of the information they are referencing. How nostalgic messages are processed may prove to be of particular interest for professional advertisers hoping to tap into already held schema. In this sense, certain product categories may be better suited for nostalgic claims. Although the above studies have suggested various ways nostalgia may be processed, in terms of ELM, researchers are still unsure of whether personal nostalgic tropes embedded in advertisements are processed centrally or peripherally (Muehling & Sprott, 2004). This study posited that nostalgia will serve as a cue to peripheral message processing. For a further explanation of this assertion, refer to the “Research Questions and Hypotheses” section at the end of this chapter.

Product Involvement

During the 1980s and 1990s, the concept of product involvement (Figure 2.3) was studied by researchers in hopes of reaching a consensus as to the definition and its influence on message processing. There was a surge of research that reconceptualized product involvement in hopes of developing an approach that successfully operationalized the construct in terms of an independent variable that influences message processing. Zaichkowsky (1986) developed the most influential and widely used scale and definitional approach to product involvement. Zaichkowsky's previous work has firmly established a commonly accepted definitional approach to product involvement that is still being used to investigate the construct in various advertising and marketing contexts.

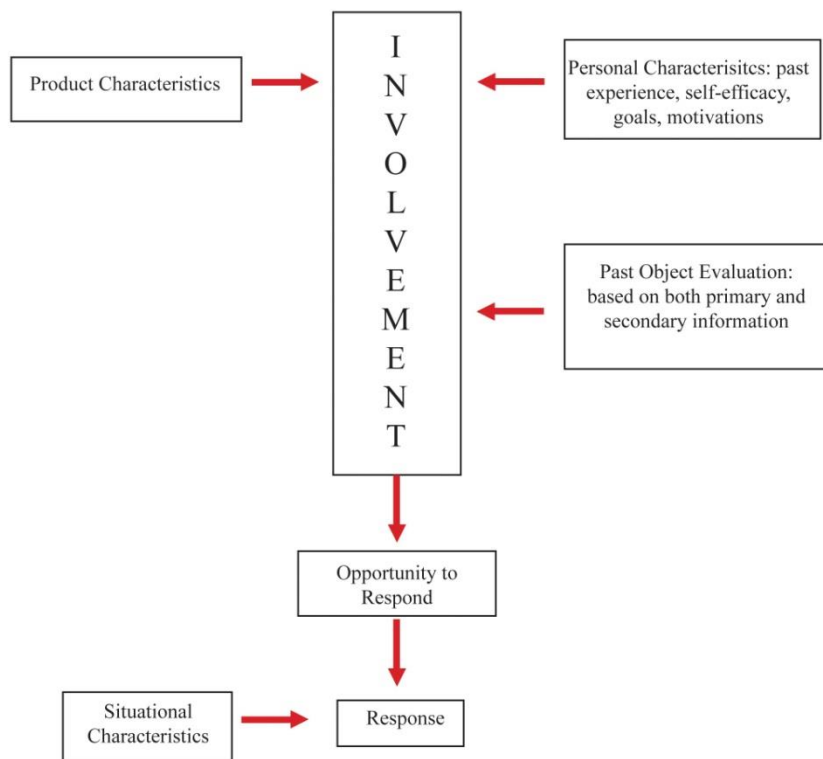


Figure 2.3: Product Involvement Framework (adapted from Zaichkowsky, 1986)

Other product involvement scales existed prior to Zaichkowsky (1986), such as Wells (1964), Leavitt (1970), and Bloch and Richins (1983), but Zaichkowsky's refinement and creation of the personal involvement inventory (PII) marked a significant step forward regarding the measurement validity of product involvement. For the purpose of this study, the following is a brief definitional approach, operationalization of product involvement, and what researchers have empirically investigated regarding product involvement as an independent variable.

Prior to the explication and review of the literature on product involvement, it is important to note the difference between brand involvement and product involvement. Product involvement is seen as enduring involvement for a product category (Zaichkowsky, 1986). While brand involvement is enduring involvement for the brand, not a specific product category (Laaksonen, 1994). For example, a brand can cut across multiple product categories and the involvement is for perceived connections between the brand and the person. Product involvement is enduring for the product category itself, regardless of brand.

The definitions of product involvement in advertising research stem from earlier works in social psychology research and the concept of ego involvement (Bloch & Richins, 1983). Sherif and Cantril (1947) argued that ego-involvement stems from unique values and attitudes held by the individual. In relation to product involvement, it is the apparent or perceived connection to a product through one's own view of the self that will influence the involvement level towards a particular product category (Bloch & Richins, 1983). These definitional approaches served as the basis for further explication and scale refinement by Zaichkowsky.

Zaichkowsky (1984) defines product involvement as "a person's perceived relevance of the object based on their interests, needs, or values" (p. 33) (see Figure 2.3). Peter and Olson (1987) define product involvement as the "degree of personal relevance, which is a function of

the extent to which the product is perceived to help achieve consequences and values of importance to the consumer” (p. 127). Laaksonen (1994) treats product involvement as a form of cognitively-based involvement and remarks that although there are certain nuances in the definitional approach each researcher uses regarding it, the vast majority refer to product involvement as “the perceived personal relevance of an object to an individual” (p. 25). The perceived relationship between the product and the self stems from many cognitive areas and constructs including past experience, self-efficacy and goals, and motivations. For the purpose of this study, Zaichkowsky’s (1986) definition of product involvement will be used to define involvement levels of both high-and low-involvement product categories. Scale items related to this independent variable are also adapted from Zaichkowsky’s work related to product involvement (Zaichkowsky, 1994).

Product involvement must also be understood in terms of its antecedents and outcomes in message processing (attitudes) and behavioral change (purchase intent). Zaichkowsky (1986) outlines three antecedents to product involvement: personal factors, object or stimulus, and situational factors. Personal factors, which influence product involvement levels, include needs, importance (perceived or actual), interest, and values (Zaichkowsky, 1986). From the above stated definition used in this study, personal factors are the unique traits that make up an individual and how closely those traits connect, or are relevant, to a product. Bloch and Richins (1983) provide a succinct definition of the perceived link between the product and a person. They refer to this as product importance and define it as “the extent to which a consumer links a product to salient, enduring, or situation-specific goals (p. 71). Zaichkowsky (1986) also outlined “object or stimulus” factors that may influence involvement levels. While “personal factors” focus on individual traits, “object or stimulus” is concerned with the second half of this study’s

definition of product involvement: the product. Characteristics of the object include differentiation of alternatives, source of communication, and content of communication (p. 6). Lastly, “situational factors” are also included as an antecedent to product involvement. Zaichkowsky (1986) includes purchase/use and occasion as factors that, based on the particular situation, mediate product involvement; based on a person’s previous experience with the product or the particular situation the person encounters the product, “situational characteristics” may mediate involvement level towards a particular product (Figure 2.3: product involvement framework).

Zaichkowsky (1986) also outlined possible outcomes of product involvement, in which three were directly applicable to this study: relative importance of product class, perceived differences in product attributes, and preference for a particular brand (p. 6). Under these possible outcomes of product involvement, as involvement increases with a particular product, these factors are posited to increase.

In advertising research, product involvement has been assessed using both qualitative focus groups and quantitative survey responses to determine the involvement level of certain products, generally as either high or low. Advertising research has also studied the effects of manipulating the involvement levels of products as an independent variable, in combination with other message-processing antecedents, to determine possible outcomes of message processing (E’Eni-Harari & Hornik, 2010; El Aoud & Neeley, 2008). For the purpose of this study, product involvement will be measured by the Personal Involvement Inventory (PII) (Zaichkowsky, 1994), which is recognized as the most refined and most widely used in advertising research (Bauer, Sauer, & Becker, 2006). PII consists of 10 bi-polar items that use 7-point semantic differential scales for each item (for example, relevant to me v. not relevant to me, important to

me v. not important to me). By computing the mean score across respondents for each item, a particular product type can be classified as either high-or low-involvement (Zaichkowsky, 1987).

A criticism that has been leveled towards PII states that while the scale has a high reliability, validity has been called into question concerning its “dual factor contradiction” (Bauer, et al., 2006) where certain scale items confound themselves. Others have suggested that PII does little in terms of measuring outcomes of advertising effectiveness and attitudinal changes. Zaichkowsky (1994) explains that the purpose of PII is not to measure the non-involvement outcomes of an advertising message, but rather it was developed as a theoretical tool for research. She describes the scale as a “tool researchers could use to measure and account for individual variation in level of involvement, or use as a manipulation check for experimental research” (p. 68).

Other published scales exist that are similar to the PII. The Wells (1964) product involvement scale was developed specifically for print advertisements. Leavitt (1970) also developed a situational product involvement scale that focuses on television ads in its scale items. Only Zaichkowsky (1994) has made significant alterations and improvement based on past criticism and validity issues.

Subsequent to publishing her original scale a decade earlier, Zaichkowsky (1994) refined the PII by reducing the number of scale items by half without significantly reducing reliability. Within the ten items, two groupings of scale items are featured: affective involvement and cognitive involvement (Zaichkowsky, 1994). The affective grouping consists of the following scale items: interesting, appealing, fascinating, exciting, and involving. The cognitive grouping consists of: important, relevant, valuable, means a lot to me, and needed. Depending upon the product category, Zaickowsky (1994) suggests that the scores between the two groupings may be

different. For example, low involvement products may score higher on affective involvement items and high involvement products may score higher on cognitive involvement items. Based on these refinements and ubiquitous use within advertising research, Zaichkowsky's (1994) revised PII scale was used for the product involvement manipulation check in the final experiment and survey design and as scale items for product involvement pilot studies.

Product Involvement Findings

Well-cited and relevant findings relating to product involvement, in the context of ad message processing, show high-and low-involvement products are processed similarly to other types of involvement in relation to the ELM (Gnepsa, 2012; Pfau, 1994). Also, product involvement varies greatly for homogenous groups (Zaichkowsky, 1986), under low involvement product advertising, "attitudes were primarily influenced by non-message factors" (Zaichkowsky, 1986, p. 6), and product involvement is often looked at as a single, independent variable in terms of message processing. Table 2.2 is a summary of key studies involving product involvement.

Important information to note from Table 2.2 relevant to this study is the general consensus among researchers that involvement level, toward the product, impacts message receptivity. Specifically, involvement scores appear to vary greatly for demographically homogenous groups. This suggests that other factors, aside from demographics, may play a role in product involvement levels and receptivity toward certain product categories. Research also suggests that young-adults product involvement relies heavily on subjective product knowledge and product category. These primary findings have been investigated in a variety of contexts including online, with varying age and demographic groups, order exposure, and peer influence.

Table 2.2 Summary of Product Involvement Findings

Study	Context	Dependent Variables	Independent Variables	Findings
Traylor (1981)	Product Involvement	Correlation between commitment and product involvement	Product involvement Brand commitment	Tendency for the products rated as LI to show a +relationship and the product rated as HI to show no relationship between involvement and brand commitment
Tyebjee (1979)	Product Involvement	Choice time	Product class Brand attitudes Brand preference	Involvement in the decision did not significantly influence choice time
Zaichkowsky (1985)	Product Involvement	Score obtained	PII Scale	Involvement scores for any product vary greatly for demographically homogeneous groups
Hupfer & Gardner (1971)	Product Involvement	Importance measured on a series of eight concentric circles	20 products 20 issues	Issues more important than products Facial tissues least important Automobiles most important
Korgaonkar & Moschis (1982)	Product Involvement	Product evaluation	High or Low-Involvement products Performance Expectations	Interaction effect: For HI product the performance evaluation is in line with prior expectations For LI product the effects are exactly the opposite
Lastovicka (1979)	Product Involvement	Acquisition Behavior	Products in situations Individual Differences	Most people reported some extended problem-solving behavior for most product-situation scenarios. Prior experience explains some variance in acquisition behavior.
Te'en-Harari & Homik (2010)	Product Involvement	Product Involvement	Age, product knowledge, peer influence, parent influence, product category	Adolescent's product involvement relies on subjective product knowledge and product category.
Pfau (1994)	Product Involvement	Attitude toward brand Attitude toward content Message Affect Mean	Receiver Involvement Message format Receiver sex	Online customer interactions reinforces product involvement, thus mediating behavioral intent
Dardis & Shen (2008)	Product involvement	Purchase Intent Attitude toward ad Attitude toward brand	Consequences (depicted in ad) Evidence type	Message framing effects may be influenced by factors that enhance or mitigate heuristic or systematic processing.
Gnepa (2012)	Product Involvement	Messaging Processing	Product involvement Copy and message content	Receptivity of creative strategies related to copy differences predicted by the ELM are mediated by product involvement.
Voorveld, Neijens, & Smit (2012)	Product Involvement	Attitude toward ad Message evaluation	Order exposure Product Involvement	Product involvement categories impact ad receptivity regarding sequence of exposure (web v. television)
Yun Yoo (2011)	Online Product Involvement	Click-Through Behavior	Product Involvement Message characteristics	Product involvement may mediate click-through behavior of online sites; as well as message characteristics and personal differences
Bauer, Sauer, & Becker (2006)	Product Involvement	CDMS	Product Involvement	Decision making styles across product categories has little validity Highly situational/product dependent
Bei & Widdows (1999)	Product Involvement	Consumer Purchase Decisions	Amount of information, product knowledge, product involvement	Experts persuaded by complex messaging, novice users persuaded by both simply and complex messaging
Hitchon & Thorson (1995)	Product Involvement	Attitudes and Recall	Repetition, product involvement, emotion	Emotion and involvement interacted significantly in their effects on brand recall
Warrington & Shim (2000)	Product Involvement	Product involvement and brand commitment	Product orientation, information sources, product attributes	Product involvement and brand commitment are not highly related, both are independent constructs

Zaichkowsky (1986) outlined three key findings that seem to be enduring and have a high level of generalizability: personal characteristics of the individual mediate responses to an advertising message, higher levels of product involvement lead to more counter-arguing, and consumers use different message cues depending on their involvement level. Across multiple studies and close to 30 years of research, these findings appear to have a high level of generalizability in terms of product involvement and message processing.

Given these suggestions, this study focused on nostalgic advertising appeals across high- and low-involvement products and how that appeal moderates outcomes of message processing.

DEPENDENT MEASURES

The dependent measures for this study were the outcomes achieved when audiences process persuasive advertising messages and include attitude toward the ad (Aad), attitude toward the brand (Abr), and purchase intent. In advertising research, these variables are commonly grouped together as a resultant overall outcome of message processing but for the purpose of this study, these variables were measured and operationalized individually. These outcome measures are the most cited in involvement and nostalgic advertising research because of their direct applicability to message processing and professional advertising concerns.

Attitude Toward the Ad

Attitude toward the ad relates to the overall messaging strategy of the advertisement and the viewer's overall impression of the message. In advertising, it is a predisposition toward a particular object that is sometimes used as predictor of behavior. It is a factor influencing favorable or unfavorable responses to a particular advertisement (MacKenzie, Lutz, & Belch, 1986). Mitchell and Olson (1981) proposed the "attitude toward the construct" and defined the construct as a reflection of "subjects' evaluation of the overall advertising stimulus" (p. 327). At

its most basic level, attitude toward ads reveals the likeability of the ad. This is an important factor in overall attitude change and/or acceptance due to its posited relationship with enhanced persuasion; likeable ads are more persuasive (Perloff, 2014). Although it has been found to be one of the most accurate indicators of attitude toward messaging (Moriarty, Mitchell, & Wells, 2012), issues arise from distinguishing what factors, such as the brand, the copy, the image, respondents “like.” Attitude toward the ad is the dominant paradigm that is used in conjunction with, and provides context to, attitude toward the brand and purchase intention research (Spears & Singh, 2004). This measure is commonly used in advertising copy testing prior to continuing with a particular strategy or releasing the final version of the ad. Copy testing usually focuses on qualitative focus groups to gain specific, detailed insights into the message or a campaign (Wimmer & Dominick, 2011), but in this case and given the amount of research that has already been done on product involvement and nostalgic advertising, semantic differential scales are used to operationalize this outcome variable. Attitude toward the ad allows for specificity regarding internal validity regarding this measure due to its specific scale items related to the overall impression of the ad.

Attitude toward the ad is posited to be directly correlated with attitude toward the brand (Mitchell & Olson, 1981). Mitchell and Olson (1981) suggest that attitude toward the ad is not independent of attitude toward the brand but a “surrogate measure” of the construct (p. 328). In this sense, favorable attitude toward the ad is posited to lead to a favorable attitude toward the brand due to the highly correlated nature of both constructs.

Attitude Toward the Brand

Attitude toward the brand refers not to the messaging of the ad, but the specific brand contained therein. Summarizing Mitchell and Olson’s (1981) and Eagly and Chaiken’s (1993)

findings regarding this construct, Spears and Singh (2004) conceptualize attitude toward the brand as “a relatively enduring, unidimensional summary evaluation of the brand that presumably energizes behavior” (p. 55). The authors make the distinction between attitudes and feelings elicited by the brand. They suggest that feelings are “transitory” and attitudes are posited to be “enduring” (p. 55).

The relationship between attitude toward the brand and purchase intent is also complex. Spears and Singh (2004) and Eagly and Chaiken (1993) suggest some fundamental issues surrounding both constructs that have remained unexamined and undetermined. Specifically, the authors assert that it is unclear if these constructs are multidimensional or independent but correlated. Previous studies have suggested that attitude toward the brand and purchase intent are highly related and may not be empirically distinct (Spears & Singh, 2004). The importance of this distinction lies in the measure of these constructs. If both are part of a single construct, scale items related to attitude toward the brand and purchase intent are meaningless because they must be independent to use composite scores (Spears & Singh, 2004). The relationship between attitude toward the brand and purchase intent is posited to be favorable when brand evaluations and attitudes are positive (Perloff, 2014; Eagly & Chaiken, 1993; Warrington & Shim, 2000). Spears and Singh (2004) developed scale items related to both constructs and determined that attitude toward the brand and purchase intent are separate but correlated dimensions. The refined measures resulted in parsimonious scale items that differentiate attitude toward the brand and purchase intent in a way that allows for valid scale items that are capable of measuring the constructs independently.

Accessibility theory (Fazio, Chen, McDonel, & Sherman, 1982) posits that attitudes are capable of directly guiding behavior through recalling attitudes from long-term memory.

Accessibility refers to “the degree to which attitude is automatically activated from memory” (Perloff, 2014, p. 106). In this activation process, the more specific attitudes are activated, the more likely those attitudes will be accessed in the future (Pashupati, 2003). The core principle of this theory is the notion that attitudes can predict behavior directly, if those attitudes can be recalled from memory at the time of decision or action. Activation at the time of decision is important because if attitudes cannot be automatically activated from long-term memory, situational factors could have a large impact on behavior.

Fazio (2007) recognizes the situational nature of systematic processing or accessing attitude memory across varying instances. For instance, some people process attitude-behavior decisions under the systematic, belief-based, process outlined by the theory of reasoned action (Fishbein & Ajzen, 1975). In other situations, depending upon ability to process, motivation, or involvement with the outcome or behavior, people can act more spontaneously than the process proposed by the theory of reasoned action. The departure away from reasoned action stems from the thought that activation of pre-existing knowledge and attitude structures related to a behavior or action can have a direct impact on behavior without systematically reasoning perceived control, norms, and attitude toward behavior.

Purchase Intent

Conceptually distinct from attitudes, purchase intent is a special case of behavioral intent and is seen as “an individual’s conscious plan to make an effort to purchase a brand” (Spears & Singh, 2004, p. 56) or specific product. This form of self-reported behavioral intent is the best available predictor of behavior if attitudes, norms, and perceived behavioral control do not preclude carrying out the behavior (purchasing the product) (Cho, 2010). These mediating cognitive processing components are a part of the theory of reasoned action (Fishbein & Ajzen,

1975) and can be used to provide a theoretical context regarding the interaction and correlatedness of the dependent measures.

Importantly, purchase intent, and behavioral intent more generally, are considered reliable predictors of behavior. The theory of reasoned action (Fishbein & Ajzen, 1975) allows for a systematic approach to the process in which attitudes and beliefs influence and predict behavior (Perloff, 2014). The crux of the theory is the assumption that people form a set of beliefs and act on them in a consistent to predictable way. Those beliefs then guide attitudes, behavioral intention, and action (Perloff, 2014). Within the interaction between beliefs and behavior, it is important to note that this theory goes beyond explaining “reasoned” decisions and behaviors; “reasoned” meaning rational and systematically processed. Fishbein and Ajzen (2010) suggest that while people may act “irrationally” or quickly without substantial cognitive effort, their core beliefs related to the action or behavior guide attitudes, intentions, and behaviors in a predictable way (Fishbein & Ajzen, 1975; Perloff, 2014). People vary in beliefs and the amount of cognitive effort devoted to various tasks and behaviors but once beliefs are formed, action is predictable based on *their* beliefs.

The theory of reasoned action features four components that highlight the path in which thoughts are cognitively processed prior to behavior: attitude toward the behavior, perceived norm, perceived behavior control, and behavioral intention (Perloff, 2014; Eagly & Chaiken, 1993). These four components shed light on the “cognitive path” that thoughts related to a behavior travel prior to influencing actions or behaviors preformed. For a deeper review of these components, refer to Table 2.3. In summary, attitude toward an object is directly related to the beliefs about that object, and attitude impacts behavioral intentions with specific intentions leading to behaviors related to the object (Spears & Singh, 2004).

Table 2.3 Theory of Reasoned Action Overview (adapted from Perloff, 2014)

Five Components	Description Related to Product Purchase
Attitude Toward Behavior	Beliefs about consequences and evaluations of consequences; is the action good or bad?
Perceived Norm	Two components: Injunctive norms: what peers think should be done Descriptive norms: perceptions regarding what others do or will do.
Perceived Behavioral Control	Perception of whether one is psychologically and physically able to perform the behavior. Helps determine whether attitude and norm predicts behavioral intention (Ability to purchase).
Above Construct Interaction	The degree to which attitude, norm, and perceived behavioral control predict intention depends on the particular context.
Behavioral Intention	The plan to put behavior into action. Behavioral intention is likely to predict actual behavior. The closer the intention is to the actual behavior, the better the prediction (Are you going to purchase product?).
Behavior	Actual performance of the task (purchase product).

Referencing the dependent measures included in this study, the theory of reasoned action can shed light on the possible interaction(s) between attitudes and purchase intention. According to reasoned action, behavioral intention is likely to predict actual behavior (Fishbein & Ajzen, 2010). Perloff (2014) suggests that the closer the intention is to the actual behavior, the more accurate the prediction of behavior. As a result, scale items related to purchase intention within the survey are directly related to the likelihood of purchasing the specific product.

One of the criticisms leveled toward reasoned action is the proposition that attitude and intention are essentially the same construct (Perloff, 2014). In this sense, the notion that attitudes and beliefs accurately predict intentions becomes obvious. Researchers have also suggested that attitudes can have a direct impact on behavior (Fazio, 2007; Fazio, Powell, & Herr, 1983; Fazio, Chen, McDonel, & Sherman, 1982; Fazio, Sanbonmatsu, Powell, & Kardes, 2008) without being mediated by intentions.

Involvement and Behavioral Intention

Both accessibility theory (Fazio, Chen, McDonel, & Sherman, 1982) and the theory of reasoned action (Fishbein & Ajzen, 1975) shed light on the process in which behavior-based outcome decisions can be made. Each provides insight into cognitive processing but from different ends of the involvement spectrum. When faced with processing information related to a product deemed to be highly involving, processing related to purchasing the product or the outcome related to the purchase can be understood within the framework of the theory of reasoned action. This can be classified as a systematic process based on beliefs that impact attitudes, perceived norms, perceived ability, and purchase intention. Because the product is high involvement, processing may be more systematic, carefully relating beliefs and attitudes toward the resultant outcome (behavior).

In a low involvement product situation, processing could be posited to resemble the associational nature and attitude activation from long-term memory from situational cues that are outlined in accessibility theory. In this sense, the attitude retrieved from memory serves as a “cognitive placeholder” when systematic, careful processing is not needed or the ability, motivation, and involvement toward an outcome, behavior, or object is not perceived as being important.

For this study, both the theory of reasoned action and accessibility theory can be used to provide a theoretical context and justification to the attitude-behavior relationship between the dependent measures. The precise “routes” taken, either systematic or associational, are less important than understanding the fundamental relationship between attitudes, intentions, and behaviors; that beliefs and attitudes toward intentions often predict behavior.

Measuring Attitudes and Intent

For each of the dependent measures listed, all were operationalized in terms of 7-point semantic differential scales that have been developed by Mitchell and Olson (1981) and Spears and Singh (2004), and the responses were averaged to determine a mean index score for each. Attitude toward the ad scale items were borrowed from Mitchell and Olson (1981). Attitude toward the brand and purchase intent were used from Spears and Singh's (2004) revised scales related to these constructs. Previous studies have largely used scales related to attitude toward the brand and purchase intent under the paradigm of attitude toward ad developed by Mitchell and Olson (1981). In terms of attitude toward the brand and purchase intent scales used in previous studies, Batra and Ray's (1986) four-item scale to measure attitude and a single-item scale to measure purchase intent and MacKenzie, Lutz, and Belch's (1986) three-item scale for attitude and three-item scale for purchase intent have been used when measuring these constructs (Spears & Singh, 2004). Each of the measures are not mutually exclusive, which is one of the reasons why they are commonly grouped for a net score or mean. For instance, because of the affect transfer hypothesis (Mitchell & Olson, 1981), there is posited to be a causal flow between attitude toward the ad and attitude toward the brand (Spears & Singh, 2004; Eagly & Chaiken, 1993).

MODERATING VARIABLES

Two confounds have been consistently cited as possible moderators to product involvement and advertising nostalgia and thus have an influence on message processing: gender and product knowledge/past usage. Both nostalgia and product involvement researchers have acknowledged the possible influence of gender on message processing; yet, researchers do not agree on the specific outcomes and consequences gender has on each of these variables.

Gender

Gender is included as a moderating variable due to its posited impact on message processing (Baker & Kennedy, 1994) and unresolved impact on and toward nostalgic receptivity and processing (Davis, 1979; Reinsenwitz, Iyer, & Cutler, 2004; Sherman & Newman, 1978; Muehling, 2013; Muehling & Sprott, 2004). Although many of the studies that have been conducted concerning personal nostalgia and advertising have a high level of external reliability, gender effects on nostalgia proneness and possible moderating effects gender may have on how messages are processed is not nearly as reliable. There are two important components that must be differentiated in order to fully understand the moderating nature of gender on nostalgic advertising. Researchers either discuss gender and nostalgia in terms of “proneness,” how likely people are to feel nostalgic (Reisenwitz, Iyer & Cutler, 2004; Davis, 1979) or in terms of researched effects of significant differences between males and females in terms of nostalgic advertising effects (Muehling & Sprott, 2004; Baker & Kennedy, 1994). Both of these treatments are important to note regardless of their inability to reach a consensus regarding the influence, if any, gender has on nostalgic advertising, cognitive processing, and consumer behavior.

In terms of proneness, Reinsenwitz, Iyer, and Cutler (2004) found that women tend to be more prone to nostalgic thoughts. Davis (1979) concluded, conversely, that men are actually more nostalgic prone than women. Sherman & Newman (1978) recognized that while there might be general gender differences, in terms of nostalgic proneness, men and women are both equally nostalgic. Similarly, Muehling and Sprott (2004), Muehling and Pascal (2012), and Muehling (2013) found that gender had non-significant effects on consumer perceptions, immediately following exposure, of the ad, the brand, or purchase intent when using nostalgic advertising themes in an experimental setting.

These mixed results have the opportunity to be applied to Baker and Kennedy's (1994) work with imagery and gender in accordance with nostalgic themes. "Meaning is usually not associated with the attributes of an object; the meaning that is assigned to a particular object is quite flexible" (p. 170). This could be explained through the very nature of advertising. Meyers (2009, p. 737) observes that "advertising markets material products through the promise of nonmaterial gains." This is why it is important for the association to be their own; meaning for them to elaborate on their own personal experience because each person is going to associate something different with what is being portrayed in the advertisement. In hopes of increasing elaboration and autobiographical referencing, each person will have a varying symbolic meaning to associate with each message (Baker & Kennedy, 1994). Baker and Kennedy hypothesized that women tend to choose items associated with particular memories (a photo) while men choose consumer items (car) to be nostalgic about. They proposed that men and women differ in the items which evoke feelings of nostalgia, depending on the product category and the time in the person's life that is being considered. For example, Baker and Kennedy (1994) suggest that men be more prone to nostalgic feelings toward specific products from their past: a first car for instance. Women, on the other hand, are hypothesized to be more nostalgic prone to products that evoke memories: a camera or photo album for example. Within this consideration, multiple pre-tests of the final version of the stimuli manipulations were conducted to determine if the nostalgic tropes presented in the experimental design indeed elicited personal nostalgic referencing for both genders.

Product involvement has undergone a similar treatment in terms of mixed results of gender effects. Pfau (1994) found that females and males process information uniquely when processing comparative advertising under high-and low-involvement product classes. In each

case, it seems that the content presented in the message, as well as the specific product type, is processed uniquely in terms of gender.

Product Knowledge

Product knowledge/past usage is also a moderating variable that might influence how the advertisements presented as the stimuli in this study may be processed (Bei & Widdows, 1999; Cameron, 1990; Sujan, 1985). Referencing the theoretical models presented above, more mental connections between the person and the product (i.e., knowledge or experience) may result in central processing according to ELM. Sujan (1985) found that when mismatched information is presented to consumers, when they have pre-existing knowledge structures related to the product, reaching evaluative decisions appears to be easier for “expert” consumers with a lot of product knowledge. The author also found that the difference between matching the information to knowledge structures and mismatched information has an influence on how, as a process, evaluative decisions get made between the information presented and a person’s knowledge structures. From these findings, this study considered the possible moderating role of prior product knowledge and its role in message processing.

RESEARCH QUESTIONS AND HYPOTHESES

Given the perceived positive association between nostalgia and involvement, and attitudes and behavioral intent (Sultan, Muehling, & Sprott, 2010; Muehling & Pascal, 2012; Braun, Ellis & Loftus, 2002; Muehling, 2013; Muehling & Sprott, 2004), content producers have realized that by linking their products to personal nostalgia, positive associations can be made that improve product perception and intent. As suggested previously, modern advertising is about creating associations, the “symbolic connections to define the brand and make it distinctive” (Moriarty, Mitchell, & Wells, 2012, p. 115), between a product and a person. Factors that drive

association are symbolism, conditioned learning, and transformation (Moriarty, Mitchell, & Wells, 2012).

The overall purpose for this study was to examine what effect(s) nostalgic-based advertising themes had on ads for high-and low-involvement products. More specifically, this study will test four hypotheses as a described below:

Based on previous findings, advertisements that feature tropes of personal nostalgia will produce more favorable attitudes towards the ad and brand than ads with no nostalgic theme (Muehling & Pascal, 2012; Muehling & Sprott, 2004; Muehling, 2013; Braun, Ellis & Loftus, 2002; Braun-LaTour, 2007; Pascal, Sprott, & Muehling, 2002; Baker & Kennedy, 1994; Sultan, Muehling, & Sprott, 2010). While these studies focused on nostalgia as an antecedent to consumer involvement, and as a mediating variable, it was predicted that personal nostalgia will be more effective than non-nostalgic ads when paired with either high-or low-involvement products.

Thus,

H 1: *Nostalgic themes are more effective than non-nostalgic ads overall (main effect), when it comes to H1a) attitude toward the ad, H1b) attitude toward the brand, and H1c) for purchase intent.*

Because of the low number of constructs between personal characteristics and the product (i.e., low-product involvement), it was expected that personal nostalgia will be processed peripherally. Because of the self-referencing nature of nostalgic advertisements, ads were considered to be intrinsically more interesting (Escalas & Krishnamurth, 1995) but the nostalgic trope was posited to be processed symbolically rather than literally (Meyers, 2009). The barriers to persuasion, through ELM, and favorable attitudes were hypothesized to be relatively low in

low involvement products with peripheral processing. Nostalgia was posited to act as an associational, symbolic cue to message processing and it was predicted:

H 2: *Nostalgic themes will be more effective when paired with a low involvement product, when it comes to H2a) attitude toward the ad, H2b), attitude toward the brand, and H2c) purchase intent.*

Due to the symbolic nature of self-referencing, it was suggested that females might be more responsive to nostalgic advertising. Baker and Kennedy (1994) found that females more likely to hold nostalgic thoughts related to symbolic objects (a photograph) than males. In the case of this study, the nostalgic tropes presented were considered “abstract” and needed to be self-referenced by the participants. According to these findings, males are more likely to hold “concrete” nostalgia for a particular object (a car). Similarly, Reisenwitz, Iyer, and Culter (2004) concluded that, in terms of individual nostalgia proneness, females were more nostalgia prone; proneness to nostalgic thoughts has been found to be a mediator to strong feelings toward the ad. So this study’s third hypothesis was:

H 3: *Across involvement levels, females are more responsive than males to advertising featuring nostalgia when it comes to H3a) attitude toward the ad, H3b) attitude toward the brand, and H3c) purchase intent.*

Beyond pure associations between the product and the self, it was posited that if respondents have prior product knowledge structures related to the product and advertisement, the ad itself will be perceived more favorably. Independent of the other variables under consideration, product knowledge was posited to positively increase participants’ attitudes and purchase intent. In relation to the theory of reasoned action and accessibility theory, attitudes related to the object (i.e., the advertisement and product) should lead to behavioral intention.

H 4: *Across levels of involvement, prior product knowledge moderates the effectiveness of advertising featuring nostalgia when it comes to H3a) attitude toward the ad, H3b) attitude toward the brand, and H3c) purchase intent.*

CHAPTER THREE

METHOD

To investigate these questions, this study used a quasi-experiment in a classroom setting (Muehling & Spratt, 2004; Pascal, Spratt, & Muehling, 2002; Muehling, 2013) that utilized a 2x2 between-subjects' factorial design that manipulated two independent variables: product involvement (high v. low) and treatment (nostalgia v. non-nostalgia). These variables were investigated using four print advertisements that served as stimuli (high involvement product with nostalgic theme, high involvement product without nostalgic theme, low involvement product with nostalgic theme, and low involvement product without nostalgic theme). The test booklet included pretest items that collected data on gender, age, and product knowledge, and three posttest-only dependent measures- attitude toward ad, attitude toward brand, and purchase intent. Manipulation checks were used to confirm whether participants thought they were reading a nostalgic versus non-nostalgic ad as well as the degree to which the product depicted in the ad was highly involving or not involving. Open-ended cognitive response questions using the thought-listing procedure were also included to probe for additional insights about participants' responses to the messages.

An experiment with post-test only questionnaire was chosen for two reasons. First, this study was interested in manipulations of independent variables and outcomes related to attitudes and purchase intent. Second, an experimental manipulation with post-test only survey is consistent with previous studies (Muehling, 2013; Muehling & Pascal, 2012). The study was conducted in keeping with a human subjects protocol approved by Colorado State University's Institutional Review Board (Appendix: B).

PARTICIPANTS

Consistent with the research that suggests nostalgia can be relevant to young adults (Muehling & Pascal, 2012; Pascal, Spratt, & Muehling, 2002), the participants in this study were undergraduate students at Colorado State University. A convenience sample was used from two sections of an undergraduate journalism course (JTC 100). This study included everyone enrolled in either section of JTC 100; no students were excluded from participating. Depending on the ages reported, the research acknowledged the possibility of excluding student responses over the age of 25 from the analysis if the nostalgia treatment was deemed not relevant to them. However, participants over the age of 25 made up 1% of the sample (2 out of 201) so it was decided to not omit any responses based on age because of the small number of students who exceeded the age of 25. The informed consent forms were placed into a separate box from the text booklet. This was done to ensure that no personal identifiers are collected through the survey booklets and the researcher had no way to link names on the informed consent form to a completed booklet. The printed names on the informed consent were also used to generate a list to award extra credit for participation.

PROCEDURE

The study was administered entirely using a paper-and-pencil test booklet in which participants viewed one print advertisement and responded to open-ended and survey questions.

Administration

Students who arrived to their regularly scheduled JTC 100 section entered the lecture hall and took their regular seats. Class was called to order by the instructor. After a brief introduction by the instructor, the researcher followed a script which introduced himself and began to give a brief orientation regarding the study, how long it will take, why they were selected to take part in

this study, that participation is optional, all answers and responses are anonymous, and what incentives are awarded by the researcher (see Appendix: C for introductory script). The researcher also gave an overview of the procedure regarding the completion of the test booklet. Instructions were given regarding the proctoring of the study and that participants should wait to turn to the next page until being prompted to do so. Prior to handing out the test booklets, participants were instructed that when they initially received their booklet, to only read the first page (the informed consent), decide if they wished to participate, sign the informed consent, and wait to turn the page until instructed to do so. The IRB approved consent form outlined the nature of the study, how the information will be used, and that participation was not required. Participants were informed that they had a choice whether or not to participate, they had the choice to stop completing the survey at any time, and their course standing would not be negatively impacted based on whether or not they participated.

Four versions of the test booklets were produced with four different stimuli (high involvement product, with nostalgia; high involvement product, without nostalgia; low involvement product, with nostalgia; and low involvement product, without nostalgia). These were sorted sequentially prior to distribution and handed out in order from the top to assure that an equal number of participants were assigned to each condition.

The researcher enlisted the assistance of the course's teaching assistants in proctoring the study. The test booklets were handed out systematically based upon where the students were seated in the lecture hall. This procedure assumed that the students were randomly distributed and each participant had an equal chance of receiving any one of the four versions of the test booklet.

Once the booklets were distributed to everyone in the lecture hall and students had an opportunity to read, understand, and sign the informed consent, the researcher began proctoring the test booklet. The procedure took a total of 10 minutes to administer and for participants to complete.

1. Participants first were prompted to turn to the second page and answer preliminary questions related to moderating variables (gender and product knowledge). Participants were also asked to confirm their age (in actual years). The researcher gave participants approximately 1 minute to respond. After completing the questions, a prompt at the bottom of the page was included to remind participants to wait to turn the page until being instructed to do so. This prompt to wait was only included on this page, the following page, and the final page of the booklet.
2. Participants were instructed to turn the page to a “blank page” used as a time for the researcher to give an overview of what was to come in the booklet.
3. Students were instructed to turn the page and view the first print ad. Participants were instructed to read and understand the ad fully prior to turning the page to the first set of questions. From here, to complete the booklet, participants were allowed to work through and respond to the questions and items at their own pace.
4. Upon completion of the final set of questions relating to the nostalgia manipulation, participants were instructed, via text prompt located at the bottom of the final page, to close the test booklet and wait for instructions.
5. With the consent and cooperation of the lead course instructor (Appendix: D), students were awarded extra credit for participation. If students elected not to participate in class, they had an opportunity to participate in another extra credit opportunity outside of the

study. The alternative extra credit assignment consisted of two open-ended questions relating to advertising (Appendix: E). The students who participated in the study, were then instructed to separate the signed informed consent from the rest of the booklet, bring both to the front of the lecture hall, and place each into separate boxes.

6. After collecting all the test booklets, participants were debriefed regarding the purpose of the study and what the researcher hoped to find.

The above procedure was used to control time variables related to viewing and responding to the stimulus. In particular, an effort was made to give participants adequate time to thoroughly read the stimuli and answer all questions. This was also achieved by instructing students that the following questions contained in the booklet directly relate to the advertisement they were about to read in hope they would give more than a cursory glance at the stimuli. Prior to full administration, the researcher ran a pre-test of the final version of the booklet to check booklet design to fix any issues that arose out of wordiness, question confusion, or any other major issues. This was used to determine the effectiveness of the design, test manipulation checks related to the product and nostalgic theme (determine the internal validity of the study), and correct any ambiguous or misleading questions/design considerations. No changes needed to be made following the final pre-test of the questionnaire booklet.

OPERATIONALIZATIONS

Cognitive Responses

Cognitive responses were operationalized by asking participants to list their thoughts in response to two prompt questions: (1) Describe the thoughts that came to mind while viewing this advertisement: and (2) What aspects of this advertisement motivate you to buy the product?

Participants were instructed to respond to each of the above questions by listing thoughts elicited by the stimuli. Petty, Ostrom, and Brock (1981) list three dimensions that have characterized cognitive responses: polarity, origin, and target. The above questions focused on origin, related to self-referencing and message elaboration, and target, thoughts related to message topic.

These responses were analyzed through emergent coding where four categories of responses were identified: nostalgic reference, product reference, ad reference, or a combination of two or more of the previous categories. Also, a simple count was conducted of these categories to analyze descriptive statistics related to frequency.

Preliminary Items/Measures of Moderating Variables

Gender was measured as a check box in which participants indicated their sex as male or female. Participants were also asked to indicate their knowledge of the product categories represented by the two ads as well as two bogus categories included as distractors. The question prompting these items were “How would you rate your overall knowledge of this product.” Product knowledge was operationalized for all product categories using the same 7-point semantic differential scales with the following bi-polar adjectival phrases: *know a lot/know nothing, never use/use every day, expert/novice, and a lot of experience/no experience.*

Dependent Variables

Attitude toward ad was operationalized by asking participants to complete the statement “The message about (product name) was:” using 7-point semantic differential scales anchored by the following bipolar adjectives/phrases: *interesting/boring, attention getting/not attention getting, good/bad, like it/dislike it, fun/not fun, informational/not informative, trustworthy/untrustworthy, accurate/inaccurate, convincing/unconvincing, and believable/not*

believable. These items were developed by Mitchell and Olson (1981) and have been found to have high reliability (Cronbach's alpha .90).

The scales for both attitude toward brand and purchase intent were developed by Spears and Singh (2004). These researchers determined that coefficient alpha scores for both scales to be adequate at .97.

Attitude toward brand was measured by asking participants to complete the statement "I would describe the (product name) as:" and will operationalized using 7-point semantic differential scales anchored by the following bipolar adjectives/phrases: *appealing/unappealing, good/bad, pleasant/unpleasant, favorable/unfavorable, and likeable/unlikeable* (Spears & Singh, 2004).

Purchase intent was measured by asking participants to complete the statement "How would you describe your intentions to purchase (product name), assuming it were available in your area?" and will be operationalized using 7-point semantic differential scales anchored by the following bipolar adjectives/phrases: *definitely/never, intend to buy/ don't intend to buy, high purchase interest/low purchase interest, will buy it/won't buy it, and probably buy it/probably won't buy it* (Spears & Singh, 2004).

Manipulation Checks

Product involvement was confirmed using Zaichkowsky's (1994) revised original personal involvement inventory (PII) scale. This revision reduced the number of scale items from 20 to 10 items while maintaining a high level of validity and reliability (Zaichkowsky, 1994). These items include 7-point semantic differential scales with the following bipolar adjectives/phrases: *relevant to me/not relevant to me, important to me/not important to me, appealing/not appealing, means a lot to me/means nothing to me, involving/uninvolving,*

valuable/no value, interesting/uninteresting, exciting/unexciting, and fascinating/boring.

Zaichkowsky (1994) found the internal scale reliability of the revised scale to be acceptable Cronbach's alpha of .90.

Note: For all semantic differential scales, the positive versus negative valence of terms were randomly alternated to avoid unintended repetition effects. During data analysis, these items were recoded to 7=positive valence and 1=negative valence.

To confirm the participants' perceptions of the ads as nostalgic v. non-nostalgic treatment, Pascal, Sprott, and Muehling's (2002) evoked nostalgia scale (NOST) was used as a manipulation check. Holbrook and Schindler's (1991) conceptualization of nostalgia as an ad that induces autobiographical, self-referencing to an experienced, lived past was used as the framework for item development (Pascal, Sprott, & Muehling, 2002). This conceptualization closely matches the proposed classification noted above. The scale items included were directly taken from Pascal, Sprott, and Muehling's (2002) study on evoked advertising nostalgia (NOST), where this scale was found to have a reliability of above a Cronbach's alpha=.90 and employed 7-point Likert scales anchored with "strongly agree" and "strongly disagree." Scale items included in this study are as follows: *reminds me of the past, helps me recall fond memories, makes me feel sentimental, and makes me reminisce about a previous experience.*

While the scale presented by Merchant, Latour, Ford, and Latour (2013) could separate personal nostalgia from historical, Pascal, Sprott, and Muehling's (2002) scale of evoked nostalgia was considered adequate to use as a manipulation check because personal nostalgia is not being measured as a dependent variable.

STIMULI AND PRETESTING INDEPENDENT VARIABLES

A total of four print advertisements were designed for this study. The methods for determining what products and what nostalgic tropes to include in the ads are described below.

The ads featured a fictitious brand for both the high and low involvement products. The use of fictitious brands was chosen as a strategy to combat confounds in brand preference, knowledge, and incongruent expectations from the brand image and familiarity what is presented in the experimental ads. The same brand name was used for both the high-and low-involvement product. This was done to reduce the number of confounds related to brand name. Due to this study's between subjects design, the research was able to use only one brand name because participants were only exposed to one stimulus. Starting with a common baseline across all respondents for perceptions regarding the brand (none, because they had no previous exposure or experience with Exxus (fictitious brand name)) aided in the reliability of the measures concerning message processing and outcomes related to attitude towards the brand; differentiating between brand involvement and product category involvement was critical to determine the internal validity of the study. Using existing brands could have confounded results because of pre-existing knowledge, brand loyalty and preferences among respondents. Previous knowledge of the product category was included as moderating variable under consideration for this study but it was directed specifically towards previous product knowledge; not brand knowledge.

All four versions of the stimulus materials followed the same basic format of design. The researcher created a basic template in which all of the nostalgia manipulation took place on the top half of the print ad. This format was done to reduce extraneous variables related to design and placement of nostalgic manipulations.

Product Manipulation

Following this procedure, nine products representing varying levels of high-and low-involvement were pre-tested using a two-page survey administered to 23 students in a JTC300 class (Appendix: F). These six products were selected from a previous pilot study where students were asked to thought-list high-and low-involvement products. For each product, students responded using a 4-item, 7-point semantic differential scale about the degree to which the specific product *was relevant to me/not relevant to me, important/not important, of concern to me/of no concern to me, and means a lot to me/means nothing to me*. For each product, a mean score based on the four scale items was then computed for each product. The results are shown below in Table 3.1.

Closet organizers, as expected, were rated as the least involving product (M=2.997, SD=1.486), followed by notebooks (M= 3.371, SD= 1.155) and bicycles (M= 4.346, SD= 1.294). While laptop computers (M=6.301, SD=.954), smart phones (M=5.841, SD=1.002), and bathroom toiletries (M=4.565, SD=1.458) were rated the most involving. A paired t-test procedure was used to compare the means for notebooks (the second lowest involving product) versus laptops and smartphones (the highest involving products). Based on this analysis and other creative considerations, laptop computer and notebooks were selected as the high involvement and low involvement product respectively, in the study (Difference in involvement scores: M=-2.930, SD=1.221, $p < .006$).

At this point a rationale was needed regarding the low involvement product selection. Through several rounds of pretests, it was determined that eliciting a nostalgia manipulation for closet organizers was too nuanced for the purpose of this study. As referenced earlier, a basic template was created to ensure all four versions of the stimuli resembled each other. Through

pretests it was found that manipulating nostalgia, in the desired direction, was too difficult to control for that particular product category. Thus, another product involvement pretest was conducted to find a suitable replacement that could more easily be manipulated in a print advertisement. Notebooks were chosen because the product category was more easily manipulated via a print advertisement, as well as having a significantly lower mean score than laptops (Laptops M=6.30, Notebooks M=3.37; difference=-2.930, $p = .006$) (Table 3.1).

Table 3.1 Descriptive Statistics- Product Involvement Pretest

(7=strongly agree, 1=strongly disagree)
n= 23

	N	Mean	Std. Deviation
Laptop Computer	23	6.301	.954
Smartphone	23	5.841	1.002
Bathroom Toiletries	23	4.565	1.458
Bicycle	23	4.346	1.294
Notebooks	23	3.371	1.155
Closet Organizer	23	2.997	1.486

Nostalgia Manipulation

Regarding the stimuli, nostalgia was operationalized as three design factors: heading, copy, and art. To reduce the number of extraneous variables relating to design, the advertisements, within and across product categories, were designed to be as similar as possible. The overall production quality of the ads was comparable in terms of sophistication, complexity, and production value. The heading and body copy's placement was identical within the product class and between product categories. The image/art used was also similar in placement, size, and design within and across product category. All brand logos and taglines were identical in placement, design, and phrasing within the product category.

The basic nostalgic themes contained within the stimuli were developed from a pilot study conducted in two sections of JTC300 (Appendix: G). Participants were asked open-ended questions related to a personal nostalgic memory, their age in the memory, and descriptive dimensions of the memory (what was the memory, specifically). From these responses, two dimensions emerged related to how old respondents were in the memory (either very young or late high school age) and what the memory was about (mainly social). From these general themes, the researcher conducted multiple pretests on various versions of the manipulations. These tests were administered to multiple undergraduate classes. The researcher found that in order to elicit nostalgic feelings while viewing the advertisements, the headline and body copy needed to be as straightforward as possible. The results of the final pre-test of the stimuli manipulations suggest that nostalgia was successfully manipulated (Laptop $M=4.821$, $SD=1.433$; Notebooks $M= 5.182$, $SD= 1.595$).

DATA ANALYSIS

After administering and collecting the completed questionnaires booklets, the quantitative responses were edited and inputted into an SPSS database. Semantic differential items that were reversed were recoded to assure consistency in valence with 7=positive valence and 1= negative valence on all index items. For each of the proposed indices, reliability analysis of the scale items were conducted using Cronbach's alpha, and each was found to be reliable. The scores were then combined into indices with mean scores and standard deviations used in the analysis. Analysis of variance was used to analyze H1 and H2, while a 2x2x2 ANOVA was employed to analyze H3 in order to examine combined effects of gender, message type and product involvement. H4 was tested using analysis of covariance (ANCOVA) to analyze effects of product knowledge (as a covariant) on evaluations. In keeping with the custom of the social sciences, results were deemed

statistically significant if there was less than a one in 20 probability that the results were obtained by chance ($p < .05$)

CHAPTER FOUR

RESULTS

DESCRIPTION OF PARTICIPANTS AND CONDITIONS

A total of 201 students participated in the in-class experiment and completed the test booklet. Of these, 91 respondents (45.3%) were male students and 110 were female (54.7%) (see Table 4.1 for full description). Consistent with the focus of this study, all but six participants were college students between the age of 18 and 22.

Table 4.1 Gender and Age Demographics of Participants

	Frequency	Percent
Gender		
Male	91	45.3
Female	110	54.7
Total	201	100.0
Age		
18	47	23.4
19	89	44.3
20	27	13.4
21	17	8.5
22	15	7.5
23	2	1.0
24	2	1.0
26	1	.5
29	1	.5
Total	201	100.0

Based upon the ordered distribution of the test booklets prior to administration, the four conditions to which participants were assigned were about equally distributed (Table 4.2).

Table 4.2 Basic Descriptive Test Booklet Versions

	N	Percent
Nostalgic Notebook	52	25.9
Laptop (Control)	49	24.4
Notebook (Control)	50	24.9
Nostalgic Laptop	50	24.9
Total	201	100

DESCRIPTIVE STATISTICS OF MEASURES

Description of Measures: Product Knowledge

Participants were asked to indicate their knowledge level of four product categories (energy drink, notebook, laptop computer, bicycle) using 7-point semantic differential scales with the following bi-polar adjectival pairs: *know a lot/know nothing*, *never use/use every day*, *expert/novice*, and *a lot of experience/no experience*. Two distractor product categories were included (energy drink and bicycle) to mask the purpose of the study. The reversed positive and negative valence of terms we recoded. Table 4.3 summarizes the scale reliability and mean index scores after the four items, per product category, were combined for each of the four product categories. Scale reliability was adequate for notebooks ($\alpha=.840$) and bicycle ($\alpha=.759$) but did not demonstrate strong scale reliability for the laptop ($\alpha=.648$) and energy drink ($\alpha=.522$). It is interesting to note that of the four products chosen for the product knowledge items, laptop computers ($M=6.017$, $SD=.811$) and notebooks ($M=5.757$, $SD=1.341$), the two that were used as products in the ad stimuli, showed the highest mean scores followed by bicycle ($M=4.875$, $SD=1.158$) and energy drink ($M=3.046$, $SD=1.264$). As will be discussed later, product knowledge, when used as a covariant, had a significant effect on responses to the low involvement, nostalgic ad.

Table 4.3 Basic Descriptive Product Knowledge Index

(7=positive, 1=negative)

	N	α	Mean	Std. Deviation
Energy Drink (dummy)	201	.522	3.046	1.264
Bicycle (dummy)	201	.759	4.875	1.158
Laptop	201	.648	6.017	0.811
Notebook	201	.840	5.751	1.341

Description of Measures: Attitude Toward the Ad

Table 4.4 shows the descriptive statistics across all four stimuli versions for the attitude toward the ad measure. Participants (n=197 listwise) were asked to respond to 10 items, all using 7-point semantic differential scales with the following bi-polar adjectival phrases: *interesting/boring, attention getting/not attention getting, good/bad, like it/dislike it, fun/not fun, informational/not informative, trustworthy/untrustworthy, accurate/inaccurate, convincing/unconvincing, and believable/not believable*. After reversed items were recorded to assure consistency of direction and mean scores were calculated for each of the scale items, an index score was created to represent Aad across all respondents which was found to be reliable ($\alpha = .874$). As was the case with all other index computations, removing items did not improve the index's reliability.

Table 4.4 Descriptive Statistics for Attitude Toward the Ad Scale

(7=positive, 1=negative)

Cronbach's $\alpha=.874$

n=197

	N	Mean	Std. Deviation
Attitude Toward Ad Index	197	4.34	0.997
Not informative/informative	201	5.14	1.480
Not believable/believable	201	4.95	1.342
Inaccurate/accurate	201	4.84	1.144
Untrustworthy/trustworthy	201	4.77	1.187
Unconvincing/convincing	201	4.34	1.529
Bad/good	197	4.26	1.377
Don't like it/like it	201	4.16	1.649
Not attention getting/attention getting	201	3.91	1.675
Boring/interesting	201	3.81	1.608
Not fun/fun	201	3.15	1.443

Description of Measures: Attitude Toward the Brand

Table 4.5 summarizes the results of attitude toward brand scale items. Participants were asked to respond to five items, all featuring 7-point semantic differential with the following bipolar adjectival phrases: *appealing/unappealing*, *good/bad*, *pleasant/unpleasant*, *favorable/unfavorable*, and *likeable/unlikeable* (Spears & Singh, 2004). After reversed items were recorded to assure consistency of direction, an index was created and Cronbach's alpha was computed and found to be highly reliable ($\alpha= .918$). An index score was created to represent Abr across for each respondent.

Table 4.5 Descriptive Statistics for Attitude Toward Brand Scale

(7=positive, 1=negative)

Cronbach's α =.918

n=201

	N	Mean	Std. Deviation
Attitude Toward the Brand Index	201	4.77	1.158
Unlikeable/likeable	201	4.89	1.220
Unpleasant/pleasant	201	4.80	1.233
Bad/good	201	4.79	1.314
Unappealing/appealing	201	4.71	1.568
Unfavorable/favorable	201	4.64	1.305

Description of Measures: Purchase Intent

Table 4.6 shows the results of participants purchase intent combined across all four stimuli versions. Participants were asked to respond to five items, all using 7-point semantic differential scales with the following bi-polar adjectival phrases: *definitely/never, intend to buy/don't intend to buy, high purchase interest/low purchase interest, will buy it/won't buy it, and probably buy it/probably won't buy it* (Spears & Singh, 2004). A reliability analysis was conducted for the 5 items (α = .917), and a purchase intent index score was then calculated to each respondent.

Table 4.6 Descriptive Statistics for Purchase Intent Scale

(7=positive, 1=negative)

$\alpha = .917$

n=201

	N	Mean	Std. Deviation
Purchase Intent Index	201	3.28	1.329
Never/definitely	201	3.61	1.476
Don't intend to buy/definitely intend to buy	201	3.27	1.497
Low purchase interest/high purchase interest	201	3.24	1.498
Won't buy/will buy	201	3.13	1.472
Probably won't buy/probably will buy	201	3.12	1.714

Description of Measures: Product Involvement (Manipulation Check)

Table 4.7 shows the results of participants product involvement scores combined across all four stimuli versions. Participants were asked to respond to 10 items, all using 7-point semantic differential scales with the following bi-polar adjectival phrases: *relevant to me/not relevant to me, important to me/not important to me, appealing/not appealing, means a lot to me/means nothing to me, involving/uninvolving, valuable/no value, interesting/uninteresting, exciting/unexciting, and fascinating/boring* (Zaichkowsky, 1994). After the 10 items were tested for reliability and found to be highly reliable ($\alpha = .916$), a purchase intent index score was created for each participant.

Table 4.7 Descriptive Statistics for Product Involvement Scale

(7=positive, 1=negative)

$\alpha = .916$

n=200

	N	Mean	Std. Deviation
Product Involvement Index	200	4.34	1.231
Not relevant to me/relevant to me	201	5.12	1.872
Not appealing/appealing	201	4.73	1.594
Not important to me/important to me	201	4.59	1.787
Not needed/needed	201	4.46	1.863
Uninvolving/involving	200	4.45	1.377
No value to me/valuable	201	4.43	1.571
Uninteresting/interesting	201	4.28	1.497
Means nothing to me/means a lot to me	201	3.93	1.623
Unexciting/exciting	201	3.86	1.584
Boring/fascinating	201	3.65	1.489

To confirm the manipulation that laptop computers were considered a high involvement product by participants, and notebooks served as the low involvement product, and to check for possible confounds related to the message (nostalgic versus non-nostalgic), analysis of variance was performed to compare the mean scores obtained in the treatments. ANOVA results for product involvement are summarized in Table 4.8. As expected, the researcher found a main effect for product involvement — laptop computers generated significantly higher product involvement scores than notebooks (Laptop M=4.634; Notebooks M=4.055; $F(1, 196) = 11.627, p = .000, \eta^2 = .001$). No main effect from nostalgia was discovered (n.s., $p = .277$). Most importantly, no interaction between nostalgia and involvement was detected (n.s., $p = .317$). This manipulation check suggests that product involvement was successfully manipulated.

Table 4.8 Manipulation Check for Product Involvement

Mean (S.D.)

	Laptop <i>High Involvement</i>	Notebook <i>Low Involvement</i>	
Nostalgic	4.810 (1.170)	4.062 (1.217)	4.428 (1.246)
Non- Nostalgic	4.455 (1.335)	4.047 (1.056)	4.251 (1.215)
	4.634 (1.261)	4.055 (1.136)	4.342 (1.231)

Description of Measures: Nostalgia (Manipulation Check)

Table 4.9 shows the results of participants' nostalgia scores combined across all four stimuli versions. Participants were asked to respond to four items, using 7-point Likert scales *reminds me of the past, helps me recall fond memories, makes me feel sentimental, and makes me reminisce about a previous experience*. After the reliability of the nostalgia scale was confirmed ($\alpha = .948$), a nostalgia index score was created (M= 3.713, SD= 1.988) for each respondent.

Table 4.9 Descriptive Statistics for Nostalgia Scale

(7=strongly agree, 1=strongly disagree)

$\alpha = .948$

n=201

	N	Mean	Std. Deviation
Ad Message Nostalgia Index	201	3.713	1.988
Reminds me of the past	201	3.046	1.264
Helps me recall fond memories	201	5.751	1.341
Makes me feel sentimental	201	6.017	0.811
Makes me reminisce about a previous experience	201	4.875	1.158

ANOVA results representing a manipulation check for nostalgia are summarized in Table 4.10. The researcher found a main effect for nostalgia in the proper direction (Nostalgic Message Condition: $M=4.92$; Non-Nostalgic Condition, $M=2.467$; $F(1, 197) = 124.657$, $p = .000$, $\eta^2 = .388$). Although the results suggest slightly higher scores for means among participants in the low involvement condition, the difference in means was not significant (Laptops $M=3.98$, Notebooks $M=3.92$, n.s., $p = .061$). No interaction effect was discovered (n.s., $p = .508$).

Table 4.10 Message Nostalgia Manipulation Check Based on Product Involvement

Mean (S.D.)

	High Involvement	Low Involvement	
Nostalgic	4.790 (1.811)	5.048 (1.669)	4.922 (1.736)
Non- Nostalgic	2.179 (1.176)	2.750 (1.493)	2.467 (1.369)
	3.498 (2.001)	3.922 (1.955)	3.713 (1.988)

HYPOTHESES TEST RESULTS

Impact of Nostalgic versus Non-Nostalgic Messages on Aad, Abr and Purchase Intent

H1: Nostalgic themes are more effective than non-nostalgic ads overall (main effect), when it comes to H1a) attitude toward the ad, H1b) attitude toward the brand, and H1c) for purchase intent.

The first hypothesis sought to determine if nostalgic ads are more effective than non-nostalgic ads. In order to address this question, the researcher used ANOVA to determine if the index scores obtained for Aad, Abr, and purchase intent favored the nostalgic ads for both high- and low-involvement products.

Only H1a pertaining to attitude toward the ad was supported (see Table 4.11), where a main effect for nostalgia was discovered (Nostalgic M=4.473; Non-nostalgic M=4.192;F

(1,193)= 3.921, $p = .049$, $\text{Eta Sq.} = .000$). No main effect for product involvement was detected (n.s., $p < .834$). No interaction effect was discovered (n.s., $p = .920$).

Table 4.11 Impact of Product Involvement and Message on Attitude Toward Ad

Mean (S.D.)

	Laptops <i>High Involvement</i>	Notebooks <i>Low Involvement</i>	
Nostalgic	4.465 (1.051)	4.481 (1.017)	4.473 (1.028)
Non- Nostalgic	4.170 (0.902)	4.214 (0.998)	4.193 (0.947)
	4.321 (0.987)	4.352 (1.012)	4.337 (0.997)

The other two dependent measures, and purchase intent had no main effect for nostalgia (see Tables 4.12 and 4.13). ANOVA results for Abr are summarized in Table 4.12. The researcher found no main effects for nostalgia (n.s., $p < .079$) or product involvement (n.s., $p < .367$), as well as no interaction effects (n.s., $p < .435$) ($F(1,197) = 3.111$, $p < .435$, $\text{Eta Sq.} = .003$). Included below are the means and standard deviations of the four stimuli conditions.

Table 4.12 Impact of Product Involvement and Message on Attitude Toward Brand

Mean (S.D.)

	Laptop <i>High Involvement</i>	Notebook <i>Low Involvement</i>	
Nostalgic	4.768 (1.175)	5.042 (1.164)	4.908 (1.172)
Non- Nostalgic	4.608 (1.098)	4.628 (1.174)	4.618 (1.131)
	4.689 (1.135)	4.839 (1.181)	4.765 (1.158)

ANOVA results for purchase intent are summarized in Table 4.13. The researcher found no main effects for nostalgia (n.s., $p = .776$). However, a main effect was discovered for product involvement in favor of the low involvement product ($F(1,197) = 17.038, p = .000, \text{Eta Sq.} = .08$). No interaction effect was discovered (n.s., $p = .970$). Included below are the means and standard deviations of the four stimuli conditions.

Table 4.13 Impact of Product Involvement and Message on Purchase Intent

Mean (S.D.)

	Laptop <i>High</i> <i>Involvement</i>	Notebook <i>Low</i> <i>Involvement</i>	
Nostalgic	2.868 (1.252)	3.623 (1.343)	3.253 (1.348)
Non- Nostalgic	2.927 (1.163)	3.668 (1.365)	3.301 (1.317)
	2.897 (1.203)	3.645 (1.348)	3.277 (1.329)

Bolstering Effects of Nostalgia

H2: Nostalgic themes will be more effective when paired with a low involvement product, based on H2a) attitude toward the ad, H2b), attitude toward the brand, and H2c) purchase intent.

The second hypothesis investigated the means scores of the low involvement, nostalgic ad and the high involvement ads to determine if nostalgia can raise the low involvement condition scores across the three dependent measures to a higher level than the high involvement condition. Thus, an interaction effect was predicted where the means for Aad, Abr, and Purchase Intent were predicted to be higher in the low involvement, nostalgic condition while the resulting scores were predicted to be lowest for the low involvement product in the non-nostalgic

condition. ANOVA results from Tables 4.11, 4.12 and 4.13 revealed no support for this hypothesis.

For Aad (Table 4.11), the predicted trend was found, and the results can be explained as a main effect in favor of nostalgic themes (Low Involvement/Nostalgic Message $M= 4.481$, $SD= 1.017$; High Involvement/Nostalgic Message $M= 4.465$, $SD= 1.051$). However, there were no statistically significant interactions effects detected for Aad (n.s., $p=.920$).

For Abr (Table 4.12), a slightly different pattern emerged where brand attitude toward the laptops and notebooks were virtually identical in the non-nostalgic message conditions (Laptops $M=4.689$, Notebooks $M=4.628$). The nostalgia-based messages seemed to have a particularly strong impact on brand attitudes toward notebooks ($M=5.042$) compared to computers ($M=4.768$). However, the interaction was not statistically significant ($p < .435$).

For purchase intent (Table 4.13), differences can be explained as a function of the higher level of purchase intent reported previously. Purchase intent levels were virtually the same in the case of laptops (Nostalgic message $M=2.868$; Non-Nostalgic message $M=2.927$). The same results applied to the low involvement product (Nostalgic message $M=3.623$; Non-Nostalgic message $M=3.668$).

Gender Effects

H3: Across levels of involvement, females are more responsive than males to advertising featuring nostalgia, when it comes to H3a) attitude toward the ad,- H3b) attitude toward the brand, and H3c) purchase intent.

The third hypothesis addressed a potential effect of gender a phenomenon identified by Baker and Kennedy (1994) and posited that females respond more favorably to nostalgic

advertising messages than males with no interaction effect. Table 4.14 provides t-test comparisons between males and females for their index scores for Aad, Abr, and Purchase Intent. Across all three dependent measures, females reported higher mean scores.

Table 4.14 Group Statistics for Gender Effect

(7=strongly agree, 1=strongly disagree)
N=197-201

	N	Mean	Std. Deviation	p- value	t-value
Attitude Toward Ad				.036	2.11 (195)
<i>Male</i>	90	4.174	.989		
<i>Female</i>	107	4.473	.988		
Attitude Toward Brand				.014	2.48 (199)
<i>Male</i>	91	4.545	1.126		
<i>Female</i>	110	4.947	1.158		
Purchase Intent				.167	1.37 (199)
<i>Male</i>	91	3.134	1.315		
<i>Female</i>	110	3.395	1.335		

To further analyze the effects of gender, a 2x2x2 ANOVA was used to determine any significant interaction effects gender had on the three dependent variables. H3 was partially supported in favor of females for H3a) under the low involvement, nostalgic condition (Table 4.15) and H3b) for the low involvement, nostalgic condition (Table 4.16). H3c) was not supported in either direction.

As seen in Table 4.15, an interaction effect was detected that increased attitude toward the ad in the low involvement, nostalgic condition for females (M=4.964, SD= .878) as compared to the other three conditions (F (1,197)= 4.536, p<.036, Eta Sq.= .045).

Table 4.15 Impact of Gender, Product Involvement and Message Type on Attitude Toward Ad

Mean (S.D.)

	Males			Females				
	Laptop <i>High</i> <i>Involvement</i>	Notebook <i>Low</i> <i>Involvement</i>		Laptop <i>High</i> <i>Involvement</i>	Notebook <i>Low</i> <i>Involvement</i>			
Nostalgia	4.438 (1.053)	4.033 (0.940)	4.210 (1.001)	4.486 (1.068)	4.964 (0.878)	4.713 (1.003)		
Non-Nostalgic	4.121 (0.923)	4.150 (1.091)	4.133 (0.986)	4.222 (0.897)	4.252 (0.956)	4.239 (0.923)		
	4.269 (0.987)	4.080 (0.993)	4.174 (0.989)	4.367 (0.994)	4.570 (0.981)	4.473 (0.987)	4.336 (0.997)	

For attitude toward the brand (Table 4.16), a main effect for gender also was detected in favor of females (Females M=4.947, Males M=4.545; $F(1,193) = 6.805, p < .010$) but no interaction was significant.

Table 4.16 Impact of Gender, Product Involvement and Message Type on Attitude Toward the Brand

Mean (S.D.)

	Males			Females				
	Laptop <i>High</i> <i>Involvement</i>	Notebook <i>Low</i> <i>Involvement</i>		Laptop <i>High</i> <i>Involvement</i>	Notebook <i>Low</i> <i>Involvement</i>			
Nostalgia	4.562 (1.369)	4.682 (1.048)	4.629 (1.187)	4.917 (1.012)	5.432 (1.176)	5.156 (1.110)		
Non-Nostalgic	4.456 (1.082)	4.444 (1.057)	4.451 (1.059)	4.767 (1.115)	4.731 (1.239)	4.746 (1.177)		
	4.504 (1.209)	4.587 (1.047)	4.545 (1.126)	4.849 (1.052)	5.039 (1.251)	4.947 (1.158)	4.765 (1.158)	

For purchase intent (Table 4.17), the main effect favoring the low involvement product was preserved, but there was no gender effect (n.s., $p < .199$) and no gender x product involvement interaction (n.s., $p < .197$) nor any gender x message type interaction (n.s., $p < .232$).

Table 4.17 Impact of Gender, Product Involvement and Message Type on Purchase Intent

Mean (S.D.)

	Males			Females			
	Laptop High Involvement	Notebook Low Involvement		Laptop High Involvement	Notebook Low Involvement		
Nostalgia	2.695 (1.188)	3.326 (1.365)	3.050 (1.315)	2.993 (1.303)	3.944 (1.269)	3.433 (1.278)	
Non- Nostalgic	2.920 (1.278)	3.656 (1.301)	3.228 (1.324)	2.933 (1.058)	3.675 (1.420)	3.357 (1.320)	
	2.817 (1.229)	3.458 (1.335)	3.134 (1.315)	2.966 (1.188)	3.793 (1.351)	3.395 (1.335)	3.276 (1.329)

Impact of Product Knowledge

H4: Across levels of involvement, prior product knowledge moderates the effectiveness of advertising featuring nostalgia, when it comes to H4a) attitude toward the ad, H4b) attitude toward the brand, and H4c) purchase intent.

Hypothesis four investigated the possible effect of product knowledge as a covariate on Aad, Abr, and purchase intent. Analysis of covariance (ANCOVA) was used to analyze the effects of product knowledge on evaluations. The index scores for product knowledge about laptops and about notebooks were analyzed separately in 2x2 ANOVA tables that treated message type (nostalgic versus non-nostalgic) and gender (male versus female) as factors.

H4 was partially supported for H4a (attitude toward ad) in the case of *low involvement product* only (notebooks) but not for the high involvement products (laptops), as illustrated by in Tables 4.17 and 4.18, respectively, which show the same means reported in Table 4.15.

For notebooks (Table 4.18) without controlling for product knowledge, a gender x message type interaction effect was detected where females who read the nostalgic message were more positively predisposed toward the ad ($M= 4.964$, $SD= .878$) compared to participants in the other three conditions ($F(1,197)= 4.536$, $p<.036$, $Eta Sq.= .045$) (see Table 4.19). Separately, product knowledge was significant as a covariate ($F(1, 196) = 7.936$, $p< .006$) but did not eliminate the significance of the interaction between gender and nostalgic message effect ($F(1,196)= 5.238$, $p< .024$). This suggests that being female and exposed to the nostalgic message, *and* being knowledgeable about notebooks, all contribute to higher attitudes toward the ad.

Table 4.18 Interaction Effect Involving Gender and Message Type on Attitude Toward Ad for the Notebook Ad, Controlling for Product Knowledge

Mean (S.D.)

	Male	Female	
Nostalgic	4.033 (0.940)	4.964 (0.878)	4.481 (1.017)
Non-Nostalgic	4.150 (1.091)	4.252 (0.956)	4.214 (0.998)
	4.080 (0.993)	4.570 (0.981)	4.352 (1.012)

* Effect of Product Knowledge as Covariate: $p<.006$
 Gender x Message Type Interaction: $p < .024$

Similar results were not found for the ad for the laptop computer representing the high involvement product. Table 4.19 shows the same ANOVA table as Table 4.17 for the laptop ad, but no main effects were found in the case of laptops (n.s., $p < .773$) and no interaction effects were detected (n.s., $p < .758$).

Table 4.19 Interaction Effect Involving Gender and Message Type on Attitude Toward Ad for the Laptop Ad, Controlling for Laptop Product Knowledge

Mean (S.D.)

	Males	Females	
Nostalgic	4.438 (1.053)	4.486 (1.068)	4.465 (1.051)
Non-Nostalgic	4.121 (0.923)	4.222 (0.897)	4.170 (0.902)
	4.269 (0.987)	4.367 (0.996)	4.321 (0.987)

* Effect of Product Knowledge as Covariate: n.s., $p < .348$

Gender x Message Interaction: n.s., $p < .758$

For H4b related to brand attitude, the same general pattern found for attitude toward the ad was detected. When analyzing for product knowledge about notebooks as a covariate, a positive effect was found ($F(1, 197) = 4.040, p < .047$) with no interaction effects (n.s., $p < .288$). As shown in Table 4.20, the same general pattern was found where females exposed to the nostalgic ads appeared to be more positively predisposed to the brand ($M=5.432$). Importantly, however, the same interaction was not statistically significant ($p < .288$) and the nostalgic (versus

non-nostalgic) message fell short of generating more positive brand attitudes overall ($F(1,97) = 3.886, p < .052$).

Table 4.20 Interaction Effect Involving Gender and Message Type on Attitude Toward Brand for the Notebook Ad, Controlling for Notebook Product Knowledge

Mean (S.D.)

	Males	Females	
Nostalgic	4.682 (1.048)	5.432 (1.176)	5.042 (1.164)
Non-Nostalgic	4.444 (1.057)	4.731 (1.139)	4.628 (1.174)
	4.587 (1.047)	5.039 (1.125)	4.839 (1.181)

* Effect of Product Knowledge as Covariate: $p < .047$
 Gender x Message Type Interaction: n.s., $p < .288$

Similar results were not found concerning the high involvement product. When analyzing for product knowledge about laptop computers as a covariate, no main (n.s., $p = .057$) or interaction effects (n.s., $p = .773$) were detected (summarized in Table 4.12).

Table 4.21 Interaction Effect Involving Gender and Message Type on Attitude Toward Brand for the Laptop Ad, Controlling for Laptop Product Knowledge

Mean (S.D.)

	Males	Females	
Nostalgic	4.562 (1.369)	4.917 (1.011)	4.768 (1.175)
Non-Nostalgic	4.456 (1.082)	4.767 (1.115)	4.608 (1.098)
	4.504 (1.209)	4.849 (1.052)	4.689 (1.135)

* Effect of Product Knowledge as Covariate: $p < .057$

Gender x Message Type Interaction: n.s., $p < .773$

For purchase intent, the same general pattern found for attitude toward the ad and brand was detected for H4c, with a significant impact of product knowledge on notebooks only, but not laptops. When controlling for product knowledge about notebooks as a covariate, a positive effect was found ($F(1, 197) = 11.185, p < .001$) with no interaction effects (n.s., $p < .218$). As shown in Table 4.22, the same general pattern was found where females exposed to the nostalgic ads appeared to be more positive predisposed to the brand ($M=3.944$).

Table 4.22 Interaction Effect Involving Gender and Message Type on Purchase Intent for the Notebook Ad, Controlling for Notebook Product Knowledge

Mean (S.D.)

	Males	Females	
Nostalgic	3.326 (1.365)	3.944 (1.270)	3.632 (1.343)
Non-Nostalgic	3.656 (1.301)	3.675 (1.420)	3.668 (1.365)
	3.458 (1.335)	3.793 (1.351)	3.645 (1.348)

* Effect of Product Knowledge as Covariate: $F(1,97)=11.185, p<.001$. Eta Square=.103
 Gender x Message Type Interaction: n.s., $p<.218$

Similar results, concerning purchase intent, were not found for the ad for the laptop computer representing the high involvement product. No main effects were found in the case of laptops (n.s., $p < .595$) and no interaction effects were detected (n.s., $p < .794$). Product knowledge was not significant as a covariate for laptops ($F(1,98) = 2.383, p < .126$) (see Table 4.23).

Table 4.23 Interaction Effect Involving Gender and Message Type on Purchase Intent for the Laptop Ad, Controlling for Laptop Product Knowledge

Mean (S.D.)

	Males	Females	
Nostalgic	3.326 (1.365)	3.944 (1.270)	3.632 (1.343)
Non-Nostalgic	3.656 (1.301)	3.675 (1.420)	3.668 (1.365)
	3.458 (1.335)	3.793 (1.351)	3.645 (1.348)

** Effect of Product Knowledge as Covariate: (F (1,98) = 2.383, p < .126) Eta Square=.025
 Gender x Message Type Interaction: n.s., p<.794

Confirmatory regression analyses showed that the effects of product knowledge were positive (i.e. increased purchase intent scores) for each of the three dependent measures: attitude for the ad (Beta=3.14, t=8.03, p<.00), attitude toward the brand (beta=3.75, t=7.06, p<.000) and purchase intent (Beta=1.87, t=3.64, p<.000).

THOUGHT LISTING ANALYSIS

To gain insights in the participant’s responses to the nostalgic messages, the open-ended responses to the two questions posed immediately after reading the ads were analyzed. Participants were asked, “(1) Describe the thoughts that came to mind while viewing this advertisement” and “(2) What aspects of this advertisement motivate you to buy the product?”

The researcher read all responses and found four emergent categories. The researcher then categorized comments into these categories for analysis. A simple frequency count was conducted on both the high-and low-involvement nostalgic ads to sort the thought listing responses for the first question “What came to mind while viewing this advertisement?” into four categories: nostalgic reference, product reference, the ad itself, and combination. Nostalgia was defined as any reference made to the past, a past memory, or thinking back to a previous time. Product reference was defined as any reference to how the product was used, features, or benefits. The ad itself was defined as any reference made the ad design, text length, or quality. The last category, combination, was used when participants referenced more than one of the above categories. Again, the purpose of this was not to search for deeper, second level connections between responses; it only serves as a starting point for further investigation regarding the type of cognitive processing that is occurring while viewing nostalgic advertisements for both high-and low-involvement products. Table 4.24 provides a brief summary of the thought listing responses for high and low involving nostalgic and non-nostalgic ads.

Table 4.24 Frequency of Thoughts Listed by Readers

	Nostalgic Laptop Computer	Nostalgic Notebook	Non-nostalgic Laptop Computer	Non-nostalgic Notebook
Nostalgic Reference	14	15	0	0
Product Reference	20	7	31	24
The Ad Itself	7	18	11	17
Combination	6	4	5	7
Total	47	44	47	48

From the thought listing procedure, several archetypal cases emerged, included below as quotes, as participants responded to the nostalgic ad for notebooks suggesting that nostalgia was able to strike a responsive reaction from participants. Examples included: “I thought about scenarios that corresponded with the ideas mentioned in the ads. Such as a road trip I went on, things I did on spring break, old and new friends.” “I thought about a great vacation I had with friends.” “They talked about old notes we hang onto in hopes of one day looking back on them. It caught my attention because it is something I do.” “Nostalgia, most definitely. A lot of memories were going through my mind.”

For the high involvement, nostalgic ad for laptops, several typical responses were: “The ad brought to mind a sense of family. It made me feel like it was a product that was important to have.” “I thought about all the good times that I can’t go back to. It’s good to think about.” “I thought back to the friends I had in high school and how I don’t see them anymore. Bittersweet.” “The text in the ad made me think back to past memories, but not really about laptops.”

From the above quotes, it could be suggested that all of those respondents were primarily processing the ad peripherally; focused on nostalgic cues and not critically analyzing the ad. Findings suggest that when the quoted participants referenced the nostalgia featured in the ad, and applied it to their own lives and experiences, the number of other thoughts elicited by the ad was non-existent; those participants only listed thoughts related to nostalgia. This can be seen by the low number of “combination” responses by the participants exposed to nostalgic ads.

Compared to the nostalgic ads, none of the participants listed a nostalgic references for the non-nostalgic ads. This suggests that the non-nostalgic ads did not elicit any nostalgic feelings or memories. This finding also reinforces the previous manipulation check finding that the nostalgic and non-nostalgic ads elicited independent claims regarding the nostalgia treatment.

Although participants did not list any thoughts related to nostalgia in the non-nostalgic ads, typical responses emerged, for both the high and low involvement products, and included product references and how the product was being positioned in terms of user benefits. Several typical responses included: “The ad reminded me of an Apple computer ad. I’m not sure if DirectSync is something that I would use that often.” “Selling a computer by letting me know that it can organize my life is interesting. I normally use my laptop for leisure but I can see how automatic uploads to my computer would be helpful.” “A notebook doesn’t seem that important until you think about how many notes are in it. I usually use my computer to take notes but I can see how this notebook would be helpful to write something down quickly.”

From the above quotes, it could be suggested that participants were focused on product benefits and how those benefits related to usage rather than an emotional sentiment to the product or the past. These findings not only suggest that the non-nostalgic ad did not elicit nostalgic feelings, confirming that the manipulations between the two treatments were in fact different, but also that participants were more prone to focus solely on the product and how the selling proposition related to their use of the product.

The discrepancy of responses that featured a product reference for the nostalgic ads between the low involvement (n= 7) and high involvement (n= 20) condition was higher than any of the other categories; there were a greater number of product related references for the high involvement product. The number of nostalgic references made were roughly the same between the high-and low-involvement products under the nostalgic condition. Even with the small amount of data from categorizing participant responses, it could be suggested that participants are more “product conscious” for the high involvement product than the low. Because the number of responses for nostalgia are similar between the high and low products, the number of

product references in the high involvement product was an interesting finding that came out of this analysis. Perhaps nostalgic based advertisements are not adequate at switching cognitive processing from central to peripheral in high involvement products.

CHAPTER FIVE

DISCUSSION

The primary aim of this study was to examine nostalgic advertising appeals and product involvement to investigate what effects each had, independently and as an interaction, on consumer attitudes and purchase intent. In doing so, two commonly used manipulations in advertising research were manipulated in the same study, something that had yet to be done for both high-and low-involvement products. The hypotheses developed for this study stemmed from previous gaps in nostalgic advertising research and/or to add to this growing body of research. Gender was included as a moderating factor for this reason. Previous studies have found mixed results when it comes to how males and females respond to nostalgic advertising claims. Previous researchers have debated the role of cognitive processing, specifically what type of processing is occurring during viewing an advertisement for both high-and low-involvement products when they are paired with nostalgia. Researchers have suspected that nostalgia is processed as a cue, something that would be common in a low involvement product advertisement, but are unsure what type of processing is taking place when paired with a high involvement product.

Despite mixed findings of this study, this research generally supports previous nostalgia and product involvement findings related to attitudes and purchase intent. As will be discussed below, several nuanced findings emerged as a result of pairing nostalgic messages with various levels of product involvement. The discussion in this chapter is divided into several sections: supported hypotheses, unsupported hypotheses, unexpected findings, implications, strengths of study, limitations, and future research suggestions. Under each of these sections, results will be

synthesized, main outcomes will be discussed, and findings will be compared to previous research in this area.

Summary of Supported Hypotheses

As the results of the four hypotheses indicate, nostalgic advertising messages in this study had a mixed effect on consumer attitudes and intentions. In terms of Aad, nostalgia was found to generate higher mean scores for both males and females as a main effect in comparison to the non-nostalgic ads. Gender also seems to play a role in nostalgic advertising receptivity. Females more positively responsive than males based on Aad and Abr.

It was hypothesized that product knowledge would moderate responses for both high-and low-involvement products. Product knowledge was found significant as covariant for all three dependent measures for the low involvement product *only*. In all cases, product knowledge was not significant as a moderator; the covariant did not account for enough of the variance in mean scores to mark it as significant as a moderator although it had an independent positive effect.

It appears that attitude toward the ad, attitude toward the brand, and purchase intent are linked. The correlations between the three dependent measures were all significant at the .000 level both on a combined and separate-by-gender basis. This supports previous research that posits attitude toward ad to be directly correlated with attitude toward brand (Mitchell & Olson, 1981). Mitchell and Olson (1981) suggest that attitude toward ad is not completely independent of attitude toward brand but a “surrogate measure” of the construct (p. 328). Indeed, many advertisers would contend that positive attitude toward the ad is a necessary condition for positive attitude toward the brand. Female participants in this study confirmed this finding with statistical significance. As will be discussed later, both males and females had higher mean scores for Abr than Aad.

In terms of the big picture, it is difficult to determine if nostalgic themes, in general when paired with low involvement products, elicit more favorable attitudes. The issue that must be addressed is what role does the product and specific nostalgic sentiment play in their responses. Perhaps females “liked” the specific appeal featured in the nostalgic manipulation of the low involvement product better than males because the product or nostalgic appeal was more relevant to them. Possible reasons for this could include that the message was actually connected to a previous product usage (product related nostalgia, where the manipulation in this study was intended to be associational) or the product category (notebooks) was seen as more relevant despite the fact that both males and females found notebooks to be low involving (see Table 4.8).

In terms of product knowledge as a moderator for each of the dependent measures, the variable was only significant as a covariate for the low involvement product. Several possible explanations can shed light on this finding. Although this age group feels that laptop computers are a high involvement product, perhaps they do not hold as many pre-existing knowledge structures related to the product category or the details of the knowledge are not important in forming attitudes. Also, the information provided in the stimulus materials may have resonated more with participants previous experiences and thus tapped into already held cognitive schemas related to the product. Best efforts were made to keep the stimulus materials as similar as possible (outside of the nostalgia manipulation) between both the high-and low-involvement products. The “Features” section displayed in all four versions of the stimuli were similar in terms of scope and specificity. The copy was also designed to be as similar as possible with similar product features and product references made for both the high-and low-involvement products. Despite these efforts, perhaps the information provided in the low involvement ad tapped into pre-existing knowledge structures related to either the product itself or a previous

experience with the product and as a result, they were more responsive to that stimulus. It should also be noted that participants may have experienced product related nostalgia, rather than associational, when viewing the low involvement ad. Researchers have suggested that product knowledge may play a more significant role as a moderator when participants have a product-related nostalgic memory to link to their product knowledge schemas (Muehling & Spratt, 2004). The scale used as a manipulation check for nostalgia in the test booklets was not able to differentiate between product-related and associational nostalgia. Scales have been developed where these two nostalgic themes can be measured independently of each other. Moving forward in this area of advertising research, it would be beneficial to include Merchant, Latour, Ford, and Latour's (2013) nostalgia scale because of its ability to distinguish between the two types of advertising nostalgia.

Summary of Unsupported Hypotheses

H1b), pertaining to attitude toward the brand, was only partially supported with a gender effect but no main effect for nostalgia ($p < .079$). Abr did not have a "causal flow" from Aad as would be expected as a main effect. H1c), purchase intent, was not supported. In both cases of high-and low-involvement, the non-nostalgic ads means were slightly higher (High Involvement $M = 2.927$, Low Involvement $M = 3.668$) than the nostalgic treatments (High Involvement $M = 2.868$, Low Involvement $M = 3.623$). Although these were not statistically significant, it is interesting to note that in both Aad and Abr, mean scores were consistently higher for the nostalgic treatment of both the high-and low-involvement products.

H2b), pertaining to the bolstering effect of nostalgic measures on brand attitudes, Abr, was only partially supported with a main effect favoring females. The nostalgic ad was able to raise responses in females but not males. H2c), purchase intent, was not supported. As described

above, purchase intent mean scores for the nostalgic treatments were slightly lower than non-nostalgic treatments.

H3 posited that females will be more responsive than males to advertising featuring nostalgia *regardless* of product involvement level. A main effect for Aad and Abr was discovered that favored females but only for the low involvement product. H4c), purchase intent, was not supported. For H3a), Aad, and H3b, Abr, the hypothesis was generally supported but not for both product involvement levels.

H4 suggested that prior product knowledge would moderate the effectiveness of advertising featuring nostalgia. Product knowledge was significant as a covariate for Aad, Abr, and purchase intent for the low involvement product only. Although a positive effect was found in the case of the low involvement product, no significant main effects were found in the case of laptops- and no interaction effects were detected.

Surprising and Unexpected Findings

The finding that, in both males and females, the mean scores for Abrand were higher than Aad was surprising. Traditionally, researchers have found that raising mean scores, by manipulating the stimuli, to be easier for Aad than Abr. Because care was taken on the study design by keeping both brand names for the high and low involvement products consistent, that can be eliminated as a possible confound. Also, this study used fictitious brand names where previous studies that have investigated nostalgic advertising themes with various degrees of product involvement have used “name brands.” Through the effect transfer hypothesis (Mitchell & Olson, 1981) it was expected that Aad and Abr would follow a causal flow; only female participants supported this flow.

Previous researchers have often combined the three dependent measures used in this study (Aad, Abr, and purchase intent) into one index because they are posited to be inter-related. This study was not able to combine for analysis purposes using MANOVA because they did not behave the same way. While Aad and Abr followed each other to some degree, purchase intent for the products that featured nostalgic themes did not follow this trend in any significant way.

Another unexpected finding was the low purchase intent mean scores for both males and females (Low Involvement $M= 3.645$, $SD= 1.348$, High Involvement $M= 2.897$, $SD= 1.203$). Another possible explanation could be the products themselves. Both of these products are not purchases continually or in any form of regularity; even the low involvement product is “situational” where it is not purchased often. Perhaps if this study was conducted a month prior to a new year of school starting (both products are relevant/needed for college students) results for purchase intent could have been different. It could be suggested that participants were not looking to purchase either product. Regarding the high involvement product, most student already own a laptop or desktop computer, and because of the price might not be ready, willing or able to purchase a relatively high-cost product. As an alternative way to measure purchase intent, it might have been useful to ask if they “want to” or “need to” purchase a laptop.

A main effect was discovered for product involvement ($p < .000$) for purchase intent. It could be suggested that participants were more likely to purchase the low involvement product over the high involvement because of the effects from the stimuli, but other factors such as low price and somewhat “situational” product categories, because they are not common, everyday purchases, could have also had an impact on mean scores/purchase intent.

It could also be argued that notebooks generated greater purchase intent because a consumer could use the product in multiple ways (journal for school, love life, hobbies, etc.) while people would have use for only one laptop in most circumstances.

Lastly, this was the first exposure participants had with the specific brand for both products. Using well-known brands, where participants could attach pre-existing knowledge structures related to the brand and the product could produce different results. Brand involvement was beyond the scope of this study but could be argued that, for the high involvement product particularly, brand preference and involvement play a role in attitudes and purchase intent.

The general finding that purchase intent overall ($M= 3.277$, $SD= 1.379$) was lower than Aad ($M= 4.334$, $SD= .997$) and Abr ($M= 4.765$, $SD= 1.158$) is not that surprising, and followed the pattern of previous research. Importantly, the findings underscore the value of utilizing multiple measures to assess ad effectiveness.

In regards to the effect of gender, Hallahan (1995) has suggested that males and females respond to promotional messages differently. This research suggests that females express more positive attitudes towards advertising in general; they were more positively predisposed to mediated messages. Meyers-Levy (1989) describes females as being comprehensive processors where they may be more willing to seek and consider advertisements as information. In this sense, it may have not been the nostalgic themes but the way females process advertisements that contributed to the higher mean scores.

Implications

The goal of this study was to add to the growing area of research surrounding nostalgic advertising themes by testing conclusions and claims that have been previously presented in past

research that have been called into question in other studies. Simply put, some of the hypotheses addressed in this research were included to test well-established conclusions in previous research (H1, H2), while others sought to shed light on confounding outcomes related to gender, product knowledge, and how are nostalgic advertisements processed (thought listing procedure). Although this research had several unexpected findings, it generally supports previous research efforts in the area of nostalgic advertising.

This research suggests that nostalgic advertising, when paired with low involvement products, has the possibility to do an excellent job selling those products to young-adult, female consumers. If the advertiser is able to connect to the consumer on a deep, emotional level it could be suggested that the advertisement does not really have a “shelf life” or a short time period to grab and alter attitudes. By connecting and possibly linking a brand or product to such a potent and intricately stored memory, it could, and has been, suggested that the claim will become more potent. However, the potential value of nostalgia for reaching males cannot be dismissed – for particular types of products, nostalgic themes might still be effective. The challenge for advertisers is to determine under what conditions, and for what types of products (whether high- or low involvement), nostalgic appeals might work.

Strengths of Study

This study successfully applied previous research findings and claims to present a 2x2 factor analysis with both nostalgia and product involvement. To truly test claims related to the three dependent variables and to eliminate as many confounding and extraneous variables as possible within the study design, using a fictitious brand was also a strength of this research. Beginning with a baseline measurement, in terms of brand appeal and perception, was key to understanding what role nostalgia and product involvement play.

All of the scales used in the research were found to have a high reliability. There were several key factors that needed to be statistically different from each other or the entire study would lose validity: product involvement and nostalgia. From a product involvement perspective, the high-and low-involvement products needed to be statically different from each other; this was achieved in this study by carefully selecting and pretesting product categories prior to full administration. Also, the nostalgic themes that were included as manipulations needed to elicit nostalgic sentiments. This was also achieved by extensive pre-testing. Most importantly, there was no interaction effect between nostalgia and product involvement; they were statistically independent of each other.

Regarding the ad design for both high-and low-involvement products, as well as nostalgic and non-nostalgic themes, the advertisements were as similar as possible. The product features that were introduced in both the nostalgic and non-nostalgic ads were the same in hopes of eliminating confounds related to selling propositions and message claims. Great care was taken to make sure the product features and main selling propositions, within the same product category, were as similar as possible. In reality, this was easier said than done when considering the researcher needed to design ads where the themes within the same product category were different but at the same time sell the same product, with the same basic message, and with the same selling proposition. As will be discussed below, some of the overall appeal of the ads may have suffered because they needed to be so similar, even across product categories, but the fact that all the ads resembled each other was consistent with the goal of the design to start all the ads with a consistent baseline of design; wherever that might have ended up.

This study also went to great lengths to ensure both product involvement and nostalgic themes were relevant to this age group; something that has previously went unreported in

nostalgic advertising research. Both the products that were selected, as well as the nostalgic theme, were deemed relevant to this age group though extensive pretests.

Limitations

This study has limited external validity due to its use of a convenience sample of undergraduate students at one university. The results may not be generalizable to the entire young-adult population as a whole or to adults more generally. Some of the specific themes included in the ads might not resonate with non-college students due to the relationship made between product features and benefits.

The ad design was challenging. The researcher found that in order to elicit nostalgic thoughts when viewing the nostalgic ad manipulation, there was no room for subtlety or relying on participants to make deeper, second-level connections. The advertisements contained in the first rounds of pre-testing the nostalgic ads were more sophisticated with deeper, more nuanced images and taglines. Because the researcher was unable to create “higher level, sophisticated” ads that elicited nostalgic thoughts based on the manipulation check, the advertisements needed to become more straightforward and direct. In the researcher’s opinion, the ads lost much of what would be considered “good, creative advertising.” Also, because the ads needed to look as similar as possible to eliminate confounds, a basic template was designed in which all the ads would follow. This limited the range of possibilities of creative design and possibly made the overall appeal of the ads suffer. The problem that arose with designing the ads for this study, as with all advertising research that employs ad design, is that this study tested a narrow category of creative. There are endless imaginative and unique creative treatments possible but the fact that “good, creative ads” are so unique and outside of what is the norm for this style of persuasive communication, research conducted within this framework has the difficult task of designing ads

that are not only effective and manipulate what is proposed, but also stay within the confines of typical advertising within a given medium.

Also on further consideration, the product selection for the high involvement product could have been better; not because it was not high involvement but because the barrier of price was much higher than the notebooks which could explain the variance in means scores between the two. It should be noted that finding a high involvement, cheap product, or a low involvement, expensive product is nearly impossible for college age students. The researcher did find a product category (toiletries), through pre-testing, that was similar in price to notebooks but upon further analysis it was determined that there was a significant gender effects in terms of involvement levels for that product category.

Based on the number of participants (n=201) the study size could have also limited the power to detect small effects, particularly with product knowledge as a moderator to nostalgia receptivity. Product knowledge index scores for laptop computers (M=6.01) and notebooks (M=5.75) were quite similar. This study may have not had enough power to find very small effect sizes because the two index scores were so similar. In general, perhaps with a larger sample size more nuanced results would have emerged from the four hypotheses.

Lastly, this study featured only one product in each product involvement condition. This limitation concerned the researcher's inability to distinguish small effects within a product category. By using two products for each involvement condition, the research could have eliminated the variance created within the category by using a particular product (laptop or notebook) as to more effectively compare variance that might exist between products. Particularly in terms of gender effects, using four products (two of each that were gender specific to males and females) different findings could have emerged. For instance, this study was not

able to address the gender effect in terms of whether the product itself or the nostalgic claim had an effect. With gender specific products for both males and females, the researcher would have had more explanatory power when it comes to gender effects.

Recommendations for Study Improvements

If replicated, the researcher would improve alter this study in several ways. The low means, in terms of purchase intent, for both high-and low-involvement products, and nostalgic and non-nostalgic ads could be explained by the fictitious brand that participants have never encountered. It is a lot to expect of one ad exposure, for a brand that has no previous ties to the participant, to actually initiate behavioral intent and change. There is no easy solution to this possible problem because in order to start all participants at the same baseline, in terms of brand knowledge, preference, and perception, a fictitious brand must be used

Also, the high involvement product would have been different. It is very difficult to find a high-and low-involvement product that are comparable in terms of price and overall readiness to purchase, but ideally that is what should be used to limit price confounds related to purchase intent and the higher barriers surrounding a higher priced product. This underscores the inherent challenge in selecting products that represent either high involvement or low involvement. More work needs to be done to fully understand what constitutes a high involvement product. For example, high involvement products have alternatively been identified in terms of their relevance, importance of use, complexity, price and riskiness of purchase (which requires diligence in decision-making to avoid making mistakes). Similarly, low involvement product situations that are applicable to multiple market segments are difficult to create. It could be argued that the mere use suggested for the notebooks in the ads heightening the personal

relevance and importance of the otherwise prosaic product, especially for females who prize relationships with others.

Future Research Suggestions

Several interesting questions that could be addressed in future research emerged from this study. Several of these suggestions stem directly from the study design and nuances that arose prior to conducting the final experiment. Others arose from reflecting on the lack of support of several hypotheses.

While conducting pre-tests related to the nostalgic manipulations for the low involvement product, one particular version of the ad elicited a somewhat negative response from participants because, referencing participants' general consensus, they felt uncomfortable with the fact that time passes so quickly. With any nostalgic advertising theme it is difficult to situate nostalgia, in any convincing way, without at least referencing where the consumer is now or where they are able to go in the future; time appears to be a central component to referencing nostalgia in advertising. In this sense, the ad was intended to elicit the feeling of time passing quickly and that they shouldn't waste time doing things they don't enjoy. Because their initial responses were negative towards this concept, it could be easy to discount it as an effective way to connect with consumers. Future research could explore the idea of creating ads that have a cathartic appeal; the contention that venting one's negative emotions will produce a positive effect on one's psychological state (Bushman, 2002), and actually harness those initial negative emotions to connect with a product. For example, time may be passing quickly and young-adults could be terrified of that fact but if an advertiser could connect a product, specifically product benefits, to solve this issue in the minds of the targets, it could be an effective way to connect with them. Obviously the benefits included in the pre-test ad described above were not enough to resolve the

uneasy feelings young-adults had regarding the passage of time but it could be an interesting area for future research related to the “bitter” part of a nostalgic memory rather than focusing solely on the “sweet” emotions connected to the memory.

Within the same study design of a 2x2 factorial with nostalgia and product involvement, future research needs to test the claims presented here by including different nostalgic themes and product categories in hope of determining which has the larger impact on attitudes and purchase intent. Specifically, females were very responsive to nostalgic advertising for the low involvement product (notebooks) but future research needs to determine how much of an impact the specific product featured in the ads, as well as varying treatments of nostalgia, have as moderating effects. Equalizing the strength (quality) or arguments in the two ads also would be important.

Zaichkowsky (1986) and Rothschild (1984) suggest that future research investigates advertising appeals and product involvement. A specific area of interest could include specific types of appeals and the applicability to certain product classes. The same products need to be tested under different appeals to understand what appeals work the best for each. Bauer, Sauer & Becker (2006) also advise that further investigation is needed regarding product involvement and decision making styles. This assertion ties into message processing of varying appeals and how that leads to attitudinal and behavioral change.

Another possible area of interest could be what role the medium plays in nostalgic advertising receptivity. This study used black and white print advertisements for its stimuli. Future research could explore what moderating role online and new media (Bakshy, Hofman, Mason & Watts, 2011; Briggs, 2011; Bright & Daugherty, 2012; Chan Yun, 2011; Christodoulides, Jevons & Bonhomme, 2012; Faber, Lee & Nan, 2004; Greenberg, 2012; Ha &

McCann, 2008; Hadija, Barnes & Hair, 2012; Hasouneh & Alqeed, 2010; Ives, 2013; Jansen, Zhang, Sobel & Chowdury, 2009; Keller & Fay, 2012; Koltay, 2011; Kumar, Bhaskaran, Mirchandani & Shah, 2013; Lapointe, 2012; Lessig, 2008; Men & Tsai, 2012; Merisavo & Raulas, 2004; Minton, Lee, Orth, Kim & Kahle, 2012; Östman, 2012; Paek, Hove & Jeon, 2013; Romaniuk, 2012; Seel, 2012; Shirky, 2008; Voorveld, Neijens & Smit, 2012; Wang, Yu & Wei, 2012; Yun, 2011; Zhang & Mao, 2008) play when being exposed to a nostalgic message and how those messages may spread from user-to-user (Uzunoğlu, 2011). Does a new, technologically advanced medium, such as video, social media or online, prompt consumers to view nostalgic ads differently? Also with the advent of new technology, specifically in measuring responses to advertising, Krugman (1971) posited the use of brain wave measures in assessing advertising processing and effectiveness. While this is common practice in advertising research today, a more direct focus could turn to nostalgic advertising receptivity and neuron activation when paired with either varying levels of product involvement.

In terms of nostalgia receptivity, this study found support that young adults do have nostalgic memories and are able to self-reference these memories to connect them with a product. Future research may also investigate younger audiences' receptivity toward nostalgic advertising. The question to address is at what point nostalgic advertising references become irrelevant to younger audiences. Are younger audiences anticipating their future more than they are yearning for their past?

This study specifically used associational nostalgia manipulations in the advertising stimuli. No moderating product knowledge effects were found when paired with associational themes in both high-and low-involvement products. Future research could investigate the use of product related nostalgia and product knowledge as a moderator of attitudes and intent. It could

be posited that product knowledge has a greater impact on product related nostalgic claims versus associational claims because the nostalgic themes contained in the ads are directly referencing a previous usage of the product.

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APPENDIX A: FINAL TEST BOOKLET

INSTRUCTIONS AND INFORMED CONSENT FORM

Contemporary advertising themes' relative influence on young-adult consumer perceptions

- You have the opportunity to participate in a research study that is specifically interested in your age group's thoughts regarding print advertising. As a result, your responses will add to a growing area of advertising research that is aimed at creating relevant and interesting ads for your age group. To compensate you for your time and responses, extra credit participation for this class will be awarded by responding to the attached questionnaire as part of this research study. Your participation is greatly appreciated, but not mandatory. Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled.

Here is the important information you should know:

- The purpose of the study is to gain insight regarding young adults' receptivity toward certain advertisements.
- You will be asked to view one print advertisement and complete a brief survey that is contained in this packet. Viewing the ad and completing the survey will only take around 10 minutes.
- You will be awarded 10 points extra credit for your participation. If you chose not to participate, you may also complete a short assignment for the same amount of extra credit.
- If you have any questions about your rights as a volunteer in this research, contact Janell Barker in Colorado State's Regulatory Integrity and Compliance Review Office at 970-491-1655.
- For questions about the survey after today, or the status of your extra credit, call co-principal investigator Matt Bray, (320) 292-6925. Mr. Bray is completing the study for his master's thesis under the direction of Professor Kirk Hallahan, who serves as the study's principal investigator. The course instructors will not be in class while you complete the survey, will not know whether you chose to participate, and will not have access to your signed consent form later.

Instructions to complete the questionnaire and earn your 10 extra credit points. Carefully read and understand these instructions.

- Sign and print your name in the spaces below. Include today's date.
- Do not begin or open the questionnaire until instructed to do so.
- Do not write your name on the survey.
- Upon completing the questionnaire, wait for instructions.
- To turn in your questionnaire, detach this signed consent form and place it into the designated box in the front of the room. Then, place your questionnaire in the other box.
- Your printed name must be legible in order to receive extra credit points. These points will be posted to RamCT gradebook by next week.

I have read the above and have agreed voluntarily to participate in this study. In exchange, I understand I will receive 10 extra credit points, in this class, for my participation.

Signature of person agreeing to take part in the study

Date

Printed name of person agreeing to take part in the study

Researcher Signature

Date

Please circle your gender: Male Female

What is your age in years? _____

For each of the products listed below, please indicate your knowledge level

Laptop Computer

Know a lot	7	6	5	4	3	2	1	Know nothing
Never use	7	6	5	4	3	2	1	Use daily
Expert	7	6	5	4	3	2	1	Novice
A lot of experience	7	6	5	4	3	2	1	No experience

Bicycle

Know a lot	7	6	5	4	3	2	1	Know nothing
Never use	7	6	5	4	3	2	1	Use daily
Expert	7	6	5	4	3	2	1	Novice
A lot of experience	7	6	5	4	3	2	1	No experience

Notebooks

Know a lot	7	6	5	4	3	2	1	Know nothing
Never use	7	6	5	4	3	2	1	Use daily
Expert	7	6	5	4	3	2	1	Novice
A lot of experience	7	6	5	4	3	2	1	No experience

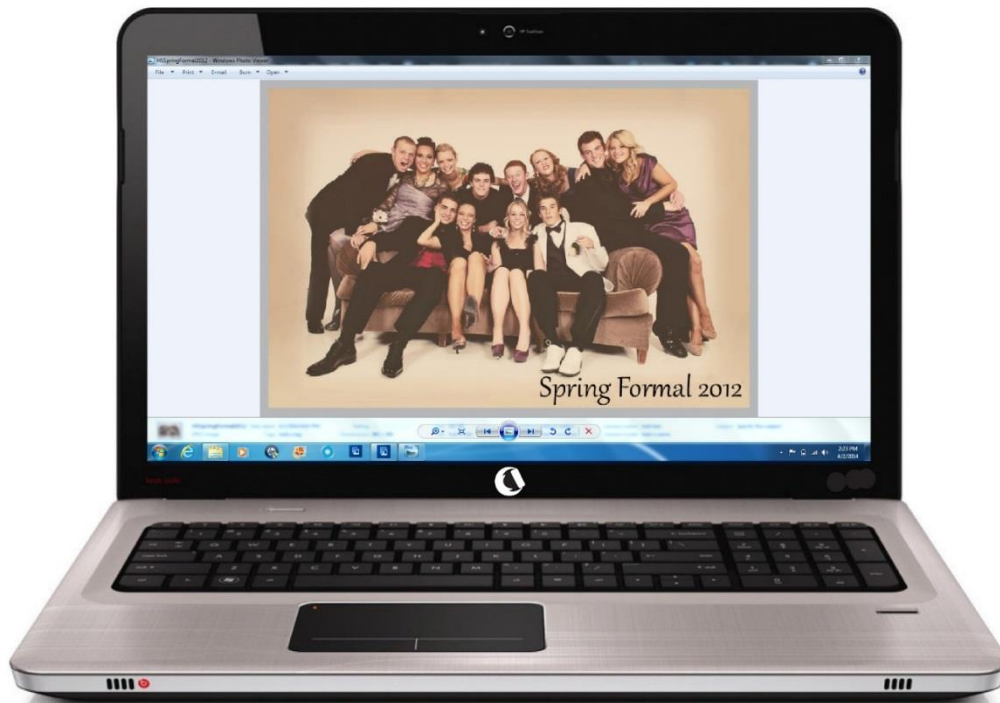
Energy Drinks

Know a lot	7	6	5	4	3	2	1	Know nothing
Never use	7	6	5	4	3	2	1	Use daily
Expert	7	6	5	4	3	2	1	Novice
A lot of experience	7	6	5	4	3	2	1	No experience

Please wait to be instructed to turn the page. Thank you.

The next page features one concept ad. The artwork is not in final form but we would appreciate your thoughts regarding the overall concept of the ad. Please read the ad fully and carefully. You will be asked questions regarding the advertisement you see.

Relive the memories.



Think back on all of the great memories you've made. All the parties with friends, roadtrips, vacations, new loves; do you want to relive those moments? Every Exxus Core Laptop includes Directsync from all of your devices for easy image and video uploads to a secure image gallery. At Exxus, we believe that our laptops are the beginning of a story. A story you can revisit. A story you can remember. Your story.



Features
Stunning Visual Experience
Directsync With Android and iOS
7 Hour Battery Life
Core i7 Processor

Exxus Computing
Life. Organized.
Exxus Computing. 2014 All Rights Reserved



Organize, don't agonize.



Organization means never having to worry if you are going to remember to save your files. Every Exxus Core Laptop includes Directsync from all of your devices for easy file, image, and video uploads to a secure gallery. With its stunning visual display, you are able to experience video and image displays like never before. With its Directsync, you will rethink the ease of organization.



Features

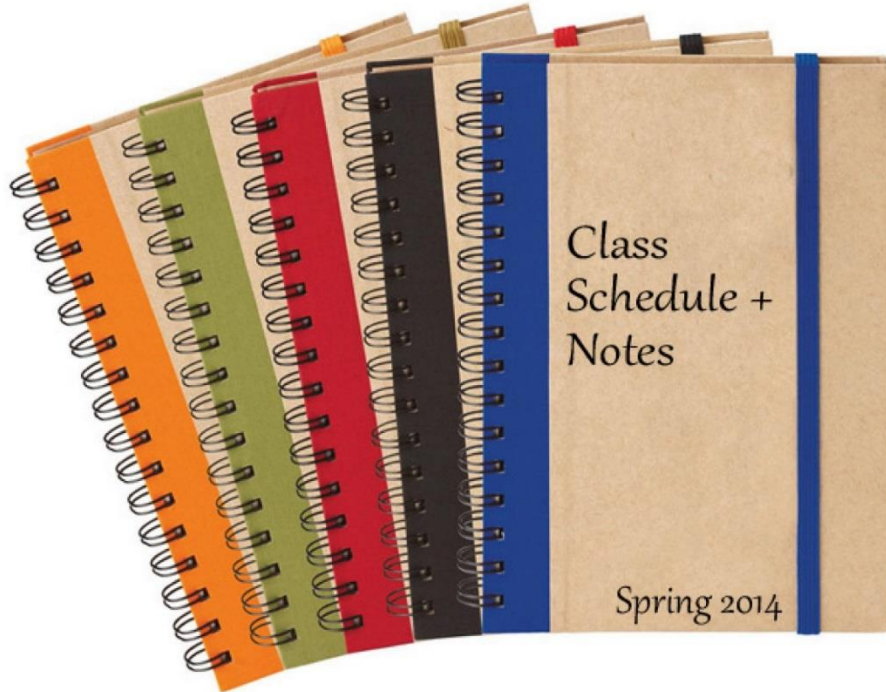
- Stunning Visual Experience
- Directsync With Android and iOS
- 7 Hour Battery Life
- Core i7 Processor

Exxus Computing
Life. Organized.

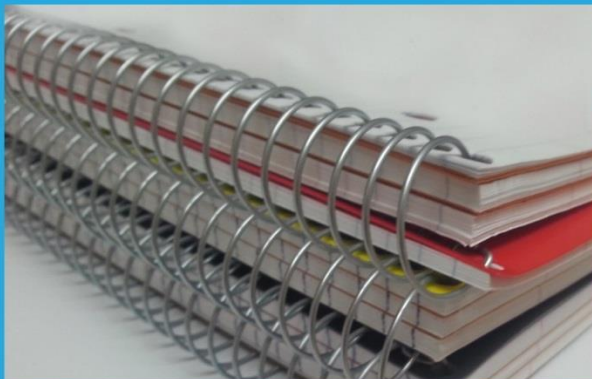
Exxus Computing 2014 All Rights Reserved



Organize, don't agonize.



Organization means never having to worry if you are going to remember that important date or when that paper is due for class. Every Exxus notebook and journal comes standard with double-binded rings and heavy-stock paper to ensure the things you take the time to write down will be there when you need them. With its convenient size, you may rethink portability. With its integrated pocket dividers, you will rethink the ease of organization.



Features

- Double-Binded Rings
- Heavy-Stock Paper
- Full-Size Pocket Dividers for Paper Storage
- College-Ruled, Perforated Edge

Exxus Paper
Time. Well Spent.



Exxus Notebooks and Paper Solutions. 2014 All Rights Reserved

Relive the memories.



Think back on all of the great memories you've made. All the parties with friends, roadtrips, vacations, new loves; do you want to relive those moments? Whether it is a love note from years ago, or a journal you've kept, our solid construction and heavy-stock paper will ensure you are able to revisit those memories for years to come. At Exxus, we believe that our notebooks and journals are the beginning of a story. A story you can revisit. A story you can remember. Your story.



Features

- Double-Binded Rings
- Heavy-Stock Paper
- Full-Size Pocket Dividers for Paper Storage
- College-Ruled, Perforated Edge

Exxus Paper
Time. Well Spent.



Exxus Notebooks and Paper Solutions. 2014 All Rights Reserved

In your own words, please respond to the following questions by listing your thoughts.

(1) Describe the thoughts that came to mind while viewing this advertisement:

(2) What aspects of this advertisement motivate you to buy the product?

Please continue to the following page. Thank you.

We would like your opinions about the advertisement you just read, the brand discussed in the message and your intentions to purchase the product you read about. For *each* of the following pairs of adjectives, circle the number that best describes your feelings. Please make sure you are circling the correct number based on your reaction to the advertisement:

The message on Exxus Computing or Exxus Paper was:

Interesting	7	6	5	4	3	2	1	Boring
Not attention-getting	7	6	5	4	3	2	1	Attention-getting
Good	7	6	5	4	3	2	1	Bad
Don't like it	7	6	5	4	3	2	1	Like it
Fun	7	6	5	4	3	2	1	Not fun
Informative	7	6	5	4	3	2	1	Not informative
Trustworthy	7	6	5	4	3	2	1	Untrustworthy
Inaccurate	7	6	5	4	3	2	1	Accurate
Convincing	7	6	5	4	3	2	1	Unconvincing
Not believable	7	6	5	4	3	2	1	Believable

I would describe the Exxus Laptop or Exxus Notebook as:

Appealing	7	6	5	4	3	2	1	Unappealing
Bad	7	6	5	4	3	2	1	Good
Pleasant	7	6	5	4	3	2	1	Unpleasant
Favorable	7	6	5	4	3	2	1	Unfavorable
Unlikeable	7	6	5	4	3	2	1	Likeable

How would you describe your intentions to purchase (product name), assuming it was available in your area?

Definitely	7	6	5	4	3	2	1	Never
Don't intend to buy	7	6	5	4	3	2	1	Definitely intend to buy
High purchase interest	7	6	5	4	3	2	1	Low purchase interest
Will buy it	7	6	5	4	3	2	1	Won't buy it
Probably won't buy it	7	6	5	4	3	2	1	Probably buy it

Please continue to the following page. Thank you.

The type or category of product featured in this advertisement is:

Relevant to me	7	6	5	4	3	2	1	Not relevant to me
Not important to me	7	6	5	4	3	2	1	Important to me
Appealing	7	6	5	4	3	2	1	Not Appealing
Means a lot to me	7	6	5	4	3	2	1	Means nothing to me
Needed	7	6	5	4	3	2	1	Not needed
Uninvolving	7	6	5	4	3	2	1	Involving
Valuable	7	6	5	4	3	2	2	No value to me
Uninteresting	7	6	5	4	3	2	1	Interesting
Exciting	7	6	5	4	3	2	1	Unexciting
Fascinating	7	6	5	4	3	2	1	Boring

The advertisement I read:

Reminds me of the past

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Helps me recall fond memories

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Makes me feel sentimental

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Makes me reminisce about a previous experience

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

*****Thank you for participating in our study and for completing our questionnaire. Please close your booklet and remain seated until instructed to turn in your questionnaire at the front of the lecture hall.**

APPENDIX B: IRB APPROVED PROTOCOL



Research Integrity & Compliance Review Office
Office of Vice President for Research
Fort Collins, CO 80523-2011
(970) 491-1353
FAX (970) 491-2293

Date: March 4, 2014

To: Kirk Hallahan, JIsm. & Tech. Comm.
Matt Bray, JIsm. & Tech. Comm.

From: Janell Barker, IRB Coordinator

Re: Contemporary Advertising Themes' Relative Influence on Young Adult Consumer Perceptions

IRB ID: 045 -15H

Review Date: March 4, 2014

This project is valid from three years from the review date.

The Institutional Review Board (IRB) Coordinator has reviewed this project and has declared the study exempt from the requirements of the human subject protections regulations as described in 45 CFR 46.101(b)(2): Research involving the use of educational tests,....survey procedures, interview procedures or observation of public behavior, unless: a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects.

The IRB determination of exemption means that:

- This project is valid for three years from the initial review. After the three years, the file will be closed and no further research should be conducted. If the research needs to continue, please let the IRB Coordinator know before the end of the three years. You do not need to submit an application for annual continuing review.
- You must carry out the research as proposed in the Exempt application, including obtaining and documenting (signed) informed consent if stated in your application or if required by the IRB.
- Any modification of this research should be submitted to the IRB through an email to the IRB Coordinator, prior to implementing any changes, to determine if the project still meets the Federal criteria for exemption.
- Please notify the IRB Coordinator if any problems or complaints of the research occur.

Please note that you must submit all research involving human participants for review by the IRB. Only the IRB or designee may make the determination of exemption, even if you conduct a similar study in the future.

APPENDIX C: INTRODUCTORY SCRIPT AND DEBRIEFING

My name is Matt Bray and I am a researcher from Colorado State University in the Journalism and Technical Communication department. We are conducting a research study on print advertisements and would love to get your thoughts regarding some ads. The title of our project is Contemporary advertising themes' relative influence on young-adult consumer perceptions. The Principal Investigator is Dr. Kirk Hallahan, Department of Journalism and Technical Communication and the Co-Principal Investigator is myself, Matt Bray, Graduate Student, Department of Journalism and Technical Communication. We would like you to view one print advertisement contained in this booklet and fill out a brief survey. Participation will take approximately 10 minutes. You are not required to participate. If you do participate, Professor Spencer will be awarding extra credit. If you do not participate, you will have the option of completing a short, open-ending response regarding advertising that will earn you the same amount of extra credit. Neither one is required by the class.

The original data collected from this study will be shared only with the primary investigator, Dr. Kirk Hallahan and myself. The aggregate data may be shared with other researchers as part of academic research. This data will be used for research purposes only and will not be retransmitted or reproduced in any way. All of your responses are anonymous; we will have no way to attach your responses to you. While there are no direct benefits to you, aside from some extra credit, we hope to gain more knowledge on advertising and how your age group feels about certain themes therein.

When you receive the booklets, if you could take one from the top and pass the rest to the person sitting next to you. When you receive your booklet, if you could read the first page regarding the nature of the study and if you choose to participate, please print your name, sign, and date the form. Please do not turn the page until being instructed to do so.

Debriefing

We hoped to find how your age group feels about nostalgic advertising themes paired with certain types of products. You either received a laptop computer advertisement or an ad for a closet organizer. You also either received an ad that contained a nostalgic theme or not. Studies have shown mixed results regarding your age group's receptivity toward nostalgic advertising and our hope is to add to this growing body of research. Any questions, comments, or concerns? Thank you for participating.

APPENDIX D: LETTER OF PERMISSION

February 12, 2014

Colorado State University
Institutional Review Board
321 General Services Building
Campus Delivery 2011
Fort Collins, CO 80523-2011
Attention: Janell Barker, Senior IRB Coordinator

Dear Ms. Barker;

I am aware that Matt Bray, a graduate student in the Journalism and Technical Communication Department at Colorado State University, is conducting a research study entitled: "Contemporary advertising themes' relative influence on young-adult consumer perceptions," and he has shared with me the details of the study. I understand the study and I feel comfortable that the participants in my class of JTC100 will be adequately protected, and I give Matt Bray permission to conduct this study in both of my sections of JTC100.

I understand that the participation of my students is voluntary. My level of involvement will be providing Matt Bray with time during my regularly scheduled lecture to conduct his research. Matt Bray has agreed to provide me with a copy of the CSU IRB approval document prior to scheduling a date to conduct the study in-class.

If there are any questions, please contact my office.

Sincerely,

Kim Spencer

Phone: (970) 491-0612
Office: C226, Clark Bldg.
Email: Kimberly.Spencer@colostate.edu

APPENDIX E: ALTERNATIVE EXTRA CREDIT

In roughly 300-600 words, please respond to the following questions.

1. Think back to some advertisements you have recently seen. These could be print, online, television, radio, ect. What was your overall impression of them? Why did you like/dislike them?

2. For the above ads, what messaging strategies do you feel the advertisers were using? How were they trying to sell you?

APPENDIX F: PRODUCT INVOLVEMENT PRETEST

For each of the 9 product items listed below, please circle the number that corresponds with your thoughts towards the product category:

1) Please indicate gender

0-Male

1-Female

2) Laptop Computer is:

Relevant to me	7	6	5	4	3	2	1	not relevant to me
Not important	7	6	5	4	3	2	1	important
Of no concern to me	7	6	5	4	3	2	1	of concern to me
Means a lot to me	7	6	5	4	3	2	1	means nothing to me

3) Television set is:

Relevant to me	7	6	5	4	3	2	1	not relevant to me
Not important	7	6	5	4	3	2	1	important
Of no concern to me	7	6	5	4	3	2	1	of concern to me
Means a lot to me	7	6	5	4	3	2	1	means nothing to me

4) Notebooks are:

Relevant to me	7	6	5	4	3	2	1	not relevant to me
Not important	7	6	5	4	3	2	1	important
Of no concern to me	7	6	5	4	3	2	1	of concern to me
Means a lot to me	7	6	5	4	3	2	1	means nothing to me

5) Smartphones are:

Relevant to me	7	6	5	4	3	2	1	not relevant to me
Not important	7	6	5	4	3	2	1	important
Of no concern to me	7	6	5	4	3	2	1	of concern to me
Means a lot to me	7	6	5	4	3	2	1	means nothing to me

6) Cleaning supplies are:

Relevant to me	7	6	5	4	3	2	1	not relevant to me
Not important	7	6	5	4	3	2	1	important
Of no concern to me	7	6	5	4	3	2	1	of concern to me
Means a lot to me	7	6	5	4	3	2	1	means nothing to me

7) Bikes (non-motorized) are:

Relevant to me	7	6	5	4	3	2	1	not relevant to me
Not important	7	6	5	4	3	2	1	important
Of no concern to me	7	6	5	4	3	2	1	of concern to me
Means a lot to me	7	6	5	4	3	2	1	means nothing to me

8) Closet organizers are:

Relevant to me	7	6	5	4	3	2	1	not relevant to me
Not important	7	6	5	4	3	2	1	important
Of no concern to me	7	6	5	4	3	2	1	of concern to me
Means a lot to me	7	6	5	4	3	2	1	means nothing to me

9) Textbooks are:

Relevant to me	7	6	5	4	3	2	1	not relevant to me
Not important	7	6	5	4	3	2	1	important
Of no concern to me	7	6	5	4	3	2	1	of concern to me
Means a lot to me	7	6	5	4	3	2	1	means nothing to me

10) Bathroom Toiletries are:

Relevant to me	7	6	5	4	3	2	1	not relevant to me
Not important	7	6	5	4	3	2	1	important
Of no concern to me	7	6	5	4	3	2	1	of concern to me
Means a lot to me	7	6	5	4	3	2	1	means nothing to me

APPENDIX G: NOSTALGIA PILOT STUDY

Please indicate gender:

Male

Female

Please respond to the following questions regarding nostalgia- a bittersweet experience through which times, places, and emotions of the past are revisited presently through encourage self-referencing.

1. Think about a memory you are particularly nostalgic about. What specifically were you doing? Describe what is going on in the memory.
2. To the best of your ability, please indicate how old you were at the time you “made the memory.” If you can’t remember a specific age, you can reference how far along you were in school (elementary, middle, high, college, ect.).
3. What about this memory makes it nostalgic to you? Why is it different than other memories you have?