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Images in fashion advertisements: their role in involvement and the consumer communications process

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IMAGES IN FASHION ADVERTISEMENTS: THEIR ROLE IN INVOLVEMENT AND THE CONSUMER COMMUNICATIONS PROCESS

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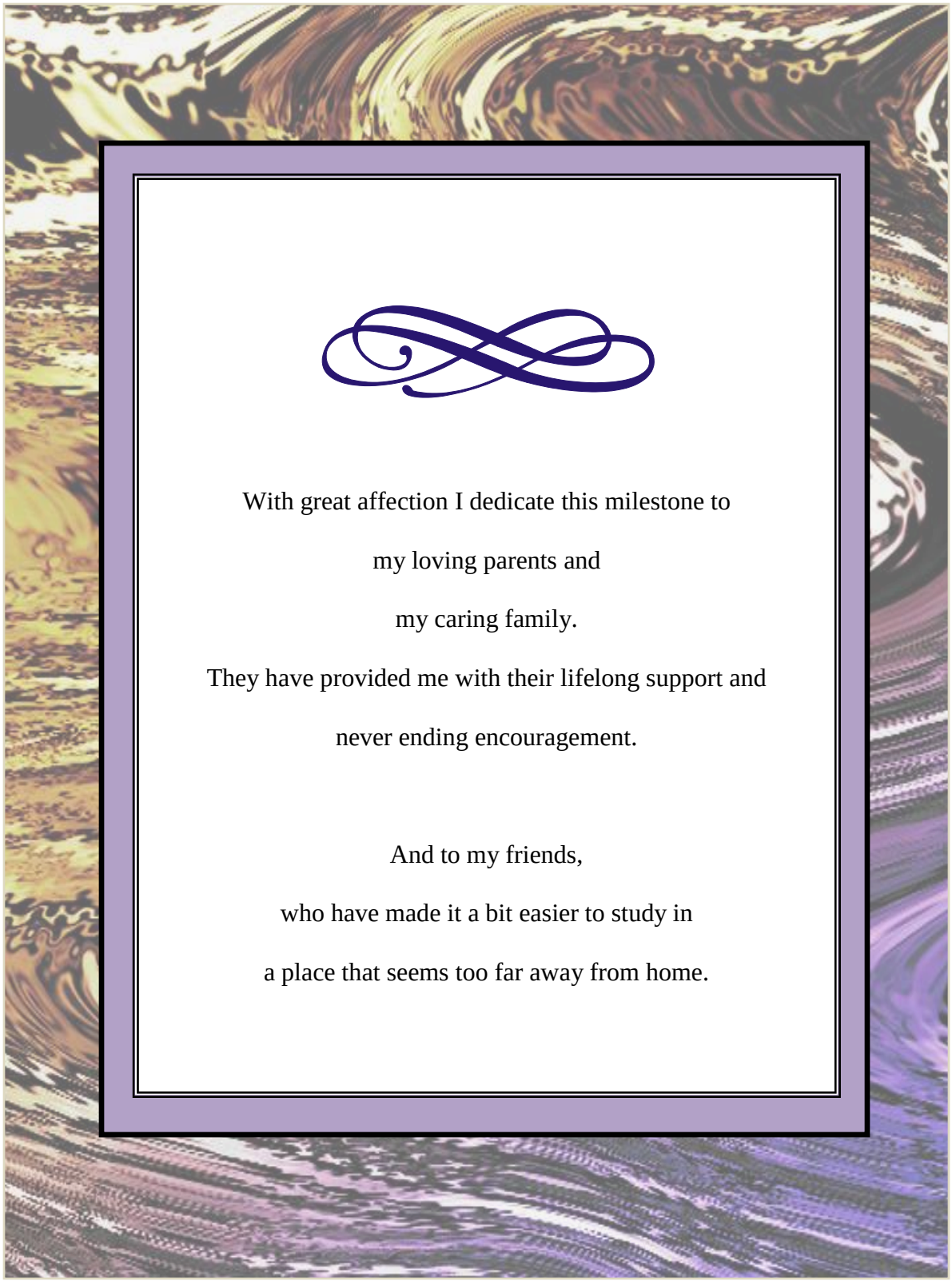
DEDICATION



With great affection I dedicate this milestone to

my loving parents and

my caring family.

They have provided me with their lifelong support and

never ending encouragement.

And to my friends,

who have made it a bit easier to study in

a place that seems too far away from home.

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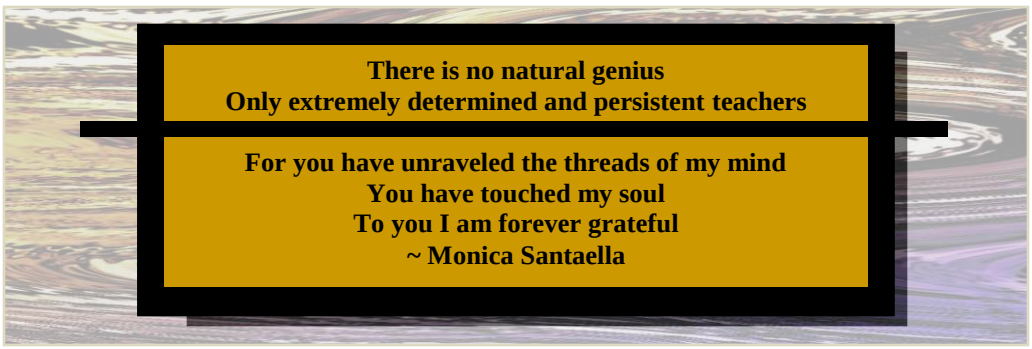

Through the cities of knowledge and understanding runs a dark river of ignorance. Though there is a bridge that unites these cities, it is paved with many questions. For those who dare to tread across it with success, illumination will await them. However, this journey will take some courage, resilience, and determination. Luckily, there are a few brave heroes and "sheroes" who have taken this journey before us. Dare to find them. They may be able to guide you, if only you are ready to listen. Ask them questions. Embrace their passions. Hear and follow their sage advice forged by years of experience. Someday, it may be your time to help others in turn. Above all, remember to be grateful. The pilgrimage will change your life forever.

Today, my deepest appreciation goes to my major professor, Dr. Teresa A. Summers. You have always led me by your example. Knowing you has given me a higher vision.

The interest my committee members Dr. Anne Cunningham Osborne, Dr. Bonnie D. Belleau, Dr. Betsy Garrison, and Dr. Judith Anne G. Folse have taken in guiding me through this journey is also appreciated. Special thanks are extended to Dr. Robert Laird who helped me to demystify many questions. I am also thankful for the unsung heroes who helped me day in and day out, the staff at LSU and the LSU System and especially my friends in Human Ecology.

Most of all, I am deeply thankful for the friendship and support that Dr. Jenna T. Kuttruff has extended to me. I hope she knows that she has played a key role in my journey.

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ABSTRACT

The importance of images as a means of persuasion in advertisements, with few exceptions, has been viewed as secondary to copy (text) in advertisements. Even though images play an important part in the communication of messages for fashion apparel, research to develop an understanding of how images influence consumers is needed. Hypotheses were developed to test the proposition that viewers' level of advertisement and fashion involvement would be moderated by type of advertisement treatment for a fashion product considered controversial: (1) copy and image, (2) copy only, and (3) image only.

Involvement, as a state that can be measured along a continuum, served as the theoretical framework. The Revised Personal Involvement Inventory (RPII) was used to measure advertisement involvement. The Fashion Involvement Index (FII) was used to measure fashion involvement as a function of product involvement. Both scales had dimensions that provided additional information to test an overall state of involvement.

A mail survey was conducted of a sample of 1,200 women with intended household income of $75,000 or higher, living in eight major metropolitan areas of the United States. The response rate was 23%. In general, the respondents were highly educated; over 30 years of age; white, not of Hispanic origin; married; full-time employed professionals; and affluent.

Hypotheses were tested using multiple regression (MR) and Pearson correlation analyses. Variation in advertisement treatment produced no moderating effects on involvement with the advertisement. Age was the only demographic characteristic found to moderate the relationship between fashion involvement and involvement with the advertisement as measured on the pleasure dimension of the RPII. There were significant relationships between fashion involvement and ownership of leather products and between level of advertisement involvement

and ownership of leather products. Results also showed significant relationships between fashion involvement and media exposure and between advertisement involvement and media exposure. Results in this study contribute to an understanding of the role of images in print advertisements for fashion apparel and further support the external validity of advertisement involvement as measured by the RPII and fashion involvement theory as measured by the FII.

CHAPTER 1

INTRODUCTION

Apparel consumers use dress not only for utilitarian reasons but also as a signaling device to express various values and symbolic meanings of more subjective social concerns and personal characteristics such as elegance, cheerfulness, or patterns of leisure activities (Holbrook & Hirshman, 1982; Kaiser, 1997). These consumers seek information from both media and non-media sources to make apparel purchase decisions (Thomas, Cassill, & Forsythe, 1991). Despite the pervasive use of images in fashion advertisements, there is little understanding of how consumers perceive visual information and process it and few studies have focused on this area of research (Kim, Damhorst, & Lee, 2002; Oh & Jasper, 2006).

The importance of images as a means of persuasion in advertisements, with a few exceptions, has been viewed as secondary to copy (text) in advertisements (Messaris, 1997). However, these views are slowly changing as research on cognition and perception suggest that even images such as sketches or stick figures may trigger the same kind of cognitive processes as verbal information (Messaris, 1997). Unfortunately, the framework to assess the effects of images in advertisements is not as well developed as that of copy (Forceville, 1996; Messaris 1997; Scott, 1994a, 1994b).

Apparel products become a symbol in consumer driven economies that are no longer constrained by tribal or political views (Polhemus, 1998). Consumption of material goods is the basic means by which contemporary society creates social life and culture (Wattansuwan, 2005). For this reason, the consumption of fashion apparel products seems to generate higher levels of involvement as consumers seek these products to portray congruent images of themselves to others (O'Cass, 2004). Marketers focus on highly involved fashion innovators who adopt new

trends earlier than most consumers and who rely on images presented in the media for trend information. These innovators significantly influence other consumers' behaviors (Goldsmith, Moore, & Beaudoin, 1999).

A fashion image of a dress in an advertisement may serve as a non-verbal cue that enhances memory, but the image can also stand as the symbolic representation of a utilitarian object (Barnard, 2002). Consequently, it could be argued that an image can convey rational information more effectively than copy because the consumer gains a better understanding of an object's physical and functional characteristics. Color, construction, length, texture, and even fit are some of the characteristics that an image of a fashion product can convey. By comparing two images, a clothing manufacturer could easily show how a special treatment may help reduce stains or prevent mosquito bites or fabric wrinkles. In addition, an image may convey complex cultural, social, economic, and situational information (Barnard, 2002). For products such as fashion apparel that have utilitarian, aesthetic, and social dimensions, more evidence is needed in order to understand how consumers' level of involvement with fashion apparel may affect their involvement with advertisements when these advertisements use images in the communication of their message.

Images may also be better at communicating aspects of visual design that are important in dress such as space, line, shape and form, light, color, texture, and pattern that convey both physical and psychological effects including optical illusions. These elements create apparent changes of height, weight, or contour of figure or color or textural properties (Davis, 1996). Because the perception of these visual illusions is not well understood, culture, education, and race may influence a consumer's ability to read such cues from an image (Segall, Cambell, & Herskovitz, 1966).

While some disciplines such as aesthetics have developed rich frameworks to understand how visual information is processed, these philosophies with roots in the arts and design have not been fully integrated with the more traditional scientific philosophies because they seem to require a less linear and systematic approach to their understanding. Consequently, there are communications researchers like Barry (2005) who continue to write philosophical essays on visual communication and perception theory from the standpoint that text is a more evolved and thus more rational cognition process. Her interpretations seem to be an example of the bias that is still evident in the literature since she does not collect data but rather draws her conclusions from a review of the evidence provided by researchers writing within the consumer behavior literature. Researchers who make subjective observations of evidence without major data analysis tend to sustain an oversimplified view that information offered in text requires higher cognitive abilities contained in the left hemisphere of the brain to process and that images are more appropriate when trying to communicate more emotional messages.

Fashion designers, producers, and retailers who rely on images in their advertisements to convey meaning without a clear understanding of how consumers use images to interpret messages and make product choices may adversely affect their products. This can be especially of special concern when advertising products considered controversial. For example, research has shown that consumers make negative and positive inferences about products from pictures used in advertisements (Mitchell & Olson, 1981). These consumers may be engaging in processes of higher issue elaboration that influence purchase behavior. Developing a better understanding of how consumers process images in advertisements can help marketers choose messages that connect with their consumers and avoid those that hinder the processing of their

messages. Additional evidence into the role of images in advertisements for apparel products may also help generate a better understanding of the behaviors that drive fashion involvement.

Advertising and marketing researchers have acknowledged the importance of images in advertisements within the communication process and recognize the need for more studies that focus on their impact (Pracejus, 2003). However, the role of images in studies of persuasion within advertising has been secondary to that of copy (Mårtenson, 1987; Messaris, 1997; Oh & Jasper, 2006; Pracejus, 2003; Scott & Batra, 2003). Thus the importance of images in advertisements has not only been diminished, but their importance in the communication process has also been limited.

Another important issue for marketers to consider is the growing trend among consumers to withhold consumption of goods and services because of ethical concerns (Auger, Burke, Devinney, & Louviere, 2003). These ethical concerns may even change how consumers process information about different product categories, but more information is needed to fully understand this phenomenon (Shaw, Grehan, Shiu, Hassan, & Thomson, 2005). Some apparel products may be considered controversial because consumers do not approve of how the products are made or from what they are made. Consumers may also feel pressure from reference groups to comply with social concerns and behaviors (Sen, Gürhan-Canli, & Morwitz, 2001). For example, animal rights activists have stalled the sales of furs, and other groups have condemned apparel companies that outsource labor to countries where labor laws are minimal or nonexistent (McCunne, 1990). The debate over labeling genetically modified foods has raised the awareness of consumers to the various risks associated with the production processes of products that otherwise would be low on their information processing scale (Kysar, 2004). Although demographic characteristics may be related to consumer's motivational state of

involvement with advertisements, other variables such as an individual's product class involvement may also be at play (Laczniak, Muehling, & Grossbart, 1993). In addition, Flynn and Goldsmith (1993) found that identifying consumers by their level of involvement was a better predictor of fashion involvement than using demographic information. Stith and Goldsmith (1989) found that ethnic differences explained less than 2% of fashion involvement.

Statement of Problem

There is awareness among apparel researchers that print advertisements are an important source of product information for consumers, especially for apparel products that may be deemed controversial. Even though images play an important part in the communication of messages for fashion apparel, research to develop an understanding of how images influence consumers is needed.

Although advertising theory may help to fill this gap in the apparel research literature, advertising theory is still evolving. Some researchers have argued that images offer issue-relevant information, may be as involving as text in advertising, and may contribute to involvement. However, the lack of agreement about how to conceptualize and measure involvement within consumer research makes it difficult to compare results, especially when some social scientists have begun to recommend simpler and more powerful methods of analyses. Previous studies have relied on student samples that may limit the generalizability of results. In addition, studies have manipulated involvement. Because involvement is a personal state that varies from person to person, it is more appropriate to measure the concept along a continuum from low to high. Therefore, more evidence about the role images play in fashion advertisements for a controversial apparel product can contribute to this evolution of the understanding of the relationship of fashion involvement and advertisement involvement.

Purpose

The purpose of this study was to explore how consumers process images and copy in a print fashion advertisement featuring an apparel product considered controversial.

Hypotheses

Based on the review of literature, the following test hypotheses were proposed:

H1. Respondents' level of involvement with an advertisement for a controversial apparel product and fashion involvement will be moderated by the type of advertisement treatment viewed: copy and image, copy only, or image only.

As a result of moderation, these results were anticipated:

a) The relationship between involvement with an advertisement and fashion involvement among respondents who saw the copy and image advertisement would be moderate for both less and more fashion involved individuals;

b) The relationship between involvement with an advertisement and fashion involvement among respondents who saw the copy only advertisement would be lower for those respondents who were less fashion involved and higher for those respondents who were more fashion involved;

c) The relationship between involvement with an advertisement and fashion involvement among respondents who saw the image only advertisement would be higher for those respondents who were less fashion involved and lower for those respondents who were more fashion involved.

H2. For respondents in all treatment groups, the relationship between advertisement involvement and fashion involvement will not be moderated by their demographic characteristics: race, age, marital status, college education, employment status, and affluence.

H3. For respondents in all advertisement treatment groups, there will be a significant relationship between fashion involvement and ownership of alligator, exotic, non-exotic and faux leather products.

H4. For respondents in all advertisement treatment groups, there will be a significant relationship between advertisement involvement and ownership of alligator, exotic, non-exotic and faux leather products.

H5. For respondents in all advertisement treatment groups, there will be a significant relationship between fashion involvement and noticing clothing featured in the media: advertisements, worn by celebrities, on television, in movies, magazines, the Internet, and up-scale catalogs.

H6. For respondents in all advertisement treatment groups, there will be a significant relationship between advertisement involvement and noticing clothing featured in the media: advertisements, worn by celebrities, on television, in movies, magazines, the Internet, and up-scale catalogs.

H7. For respondents in different advertisement treatment groups, there will be a significant relationship between fashion involvement and persuasiveness to buy.

H8. For respondents in different advertisement treatment groups, there will be a significant relationship between fashion involvement and likelihood to buy.

H9. For respondents in different advertisement treatment groups, there will be a significant relationship between advertisement involvement and persuasiveness to buy.

H10. For respondents in different advertisement treatment groups, there will be a significant relationship between advertisement involvement and likelihood to buy.

Assumptions

Americans perceive advertisements to be paid speech intended to communicate the benefits of products and services available in the marketplace. Among consumers, there is a

general awareness that the goal of the advertiser is to persuade them to buy products or services and because there is some degree of competition for most products and services, advertisers try to feature their products in the best light possible. Within the marketplace, most individuals participate in the economy as consumers who wish to satisfy their needs, wants, and desires by purchasing goods and services of value to them. However, consumers differ in their interest in processing advertising information and in their level of advertising exposure. For this reason, many consumers will fail to process advertisement information.

Limitations

The results of this study may not be generalizable to other types of products. The sample was limited to affluent female consumers in urban areas. Therefore, the results may not be generalizable to men or less affluent women living in urban or rural areas.

Definition of Terms

Aesthetic: "the sensitive selection or appreciation of formal, expressive, or symbolic qualities of the product or environment, providing non-instrumental benefits that result in pleasure or satisfaction" (Fiore, 1997, p.4).

Argument: a short statement of subject matter stating a reason or reasons offered for or against something (Neufeldt & Guaralnik, 1986, p.73).

Cognition: "the activities involved in perceiving, thinking, reflecting, and understanding" (Foxall, Goldsmith, & Brown, 1998, p.51).

Copy: "all written or textual material in an advertisement" (Imber & Toffler, 1987, p.119).

Emotional motives: "imply the selection of goals according to personal or subjective criteria (e.g., the desire for individuality, pride, fear, affection, status)....based on the individual's own

need structure, as well as on past behavioral and social (or learned) experiences" (Schiffman & Kanuk, 2007, p.88).

Fashion: "…a culturally endorsed form of expression, in a particular material or non-material phenomenon, which is discernible at any given time and changes over time within a social system or group of associated individuals" (King & Ring, 1980, p.13).

Image: "visual counterpart or likeness of an object a person or a scene" (Imber & Toffler, 1987, p.235).

Involvement: "…a person's perceived relevance of the object based on inherent needs, values, and interests" (Zaichkowsky, 1985, p.342).

Media: "channels of communication that serve many diverse functions….The media carry the advertisers' messages and serve as a vital link between the seller of a product or service and the consumer" (Imber & Toffler, 1987, p.295).

Message: "in the communication process, the information that gets passed from communicator to receiver" (Imber & Toffler, 1987, p.301).

Paradigm: "an accepted model or pattern" (Kuhn, 1996, p.23).

Persuasion: "…a change in the mental state of others rather than their conduct directly" (O'Keefe, 1990, p.16).

Rationality: "...assumes that consumers behave rationally by carefully considering all alternatives as they choose those objects that give them the greatest utility….implies that consumers select goals based on totally objective criteria such as size, weight, price, or miles per gallon" (Schiffman & Kanuk, 2007, p.88).

CHAPTER 2

LITERATURE REVIEW

Textile and apparel researchers often encourage retailers and manufacturers to provide consumers with more product information (Thomas et al., 1991). Print advertisements are one visible way to communicate the latest fashion information and the images in them often play a key role in the communication of the fashion message. Despite the extensive use of images in advertisements for fashion apparel, research on the way in which consumers respond is limited (Oh & Jasper, 2006). Consequently, there is a gap in the literature about the influence of images on consumer behavior toward fashion apparel products.

The role and relevance of images in advertisements to promote the latest fashions for apparel is not well understood within the textile and apparel research literature (Oh & Jasper, 2006). However, a review of the consumer behavior, advertising, social psychology, economic, and psychology literature revealed a better understanding of the use of images emerges. While images, as relevant arguments in the advertisement messages, have not always been the central topic of study among these disciplines, various articles have been written that may offer some insight into consumers' perceptions.

Often, however, the framework used in these studies relegated images to the role of cues that reinforce verbal information by arguing that images are subordinate to verbal information and thus make advertisement information more memorable (Scott, 1994a, 1994b). This view of images has lately drawn criticism from researchers doing work in this area (Scott & Batra, 2003). However, these researchers have problems of their own. In their review of the visual literature Kenney and Scott (2003) suggest problems that emerge because "few of the essays test the same theories and if they do, then they test the theories in different ways" (p.49). In addition, "in

many of the essays there is no mention of how the author(s) conducted their analysis" (p.49) and "replication is uncommon" (p.49). For this reason, a review of the information processing theory provides some understanding not only of the role images play within the consumer-learning paradigm, but also how more research is needed in order to find how marketers may communicate with their consumers, especially when their products may be controversial.

Theoretical Framework

When marketers see consumers as active learners of new product information, they rely on elements taken from different learning theories to understand the processes by which consumers not only perceive information, but also use information to purchase, consume, and dispose of products and even tell others about their experiences (Solomon, 2007). However, learning theorists do not agree on how learning takes place and have developed many models to help explain how different elements interact in problem solving (Schiffman & Kanuk, 2007). As a result, in order to use information processing theories one must understand how researchers have framed different consumer communication problems in order to see why certain variables chosen influence their views and interpretations of the evidence on how consumers process information.

For example, in their effort to understand advertising effects, some researchers have studied how consumers process images within models of learning theory. However, these models tend to view consumers' information processing behavior in a linear fashion. Consequently, these theories have been developed from the perspective that consumers use hierarchical processes of thinking similar to sequential computer logic (Foxall et al., 1998). As a result, images are often treated as peripheral cues. While these views have been the subject of criticism, further research is needed to examine the relationships of the variables at play from a different

perspective and thus see if the evidence suggests that the role of images in advertisements can be better understood.

Involvement Theory

Involvement theory has been widely used to explain how consumers process information (Celsi & Olson, 1988). The concept of involvement can describe how individuals, as consumers motivated to attain a goal, connect with products, product categories, advertisements, or purchase situations (Houston & Rothschild, 1978). Different types of involvement, such as enduring involvement, have been theorized in an effort to describe how consumers process product information including advertisements during certain purchase situations and over time (Laczniak, Muehling, & Grossbart, 1989). In apparel research, for example, fashion involvement has been used to explain how information influences a consumer's apparel choice (O'Cass, 2004).

The concept of involvement has generated much interest given its perceived impact on consumers' purchase behavior (Solomon, 2007). However, differences in how researchers have not only conceptualized involvement, but also measured it make it difficult to replicate findings among research studies (Cole, Etterson, Reinke, & Schrader, 1990; Costley, 1988). Comprehensive overviews of how the concept developed offer multiple ways to compare and contrast the differing points of view (Andrews, Durvasula, & Akhter, 1990; Antil, 1984; Areni & Lutz, 1988; Higie & Feick, 1989; Laczniak et al., 1989; Zaichkowsky, 1986).

Generating consensus among involvement researchers on the meaning of involvement has proven problematic to the nature of theory development. For this reason, the quantity and diversity of models used to frame the concept have resulted in a variety of differing ways to explain how information-processing takes place in the social sciences and how to view its effects. Left-right hemispheric laterality, dual-processing hypothesis, and sequential versus

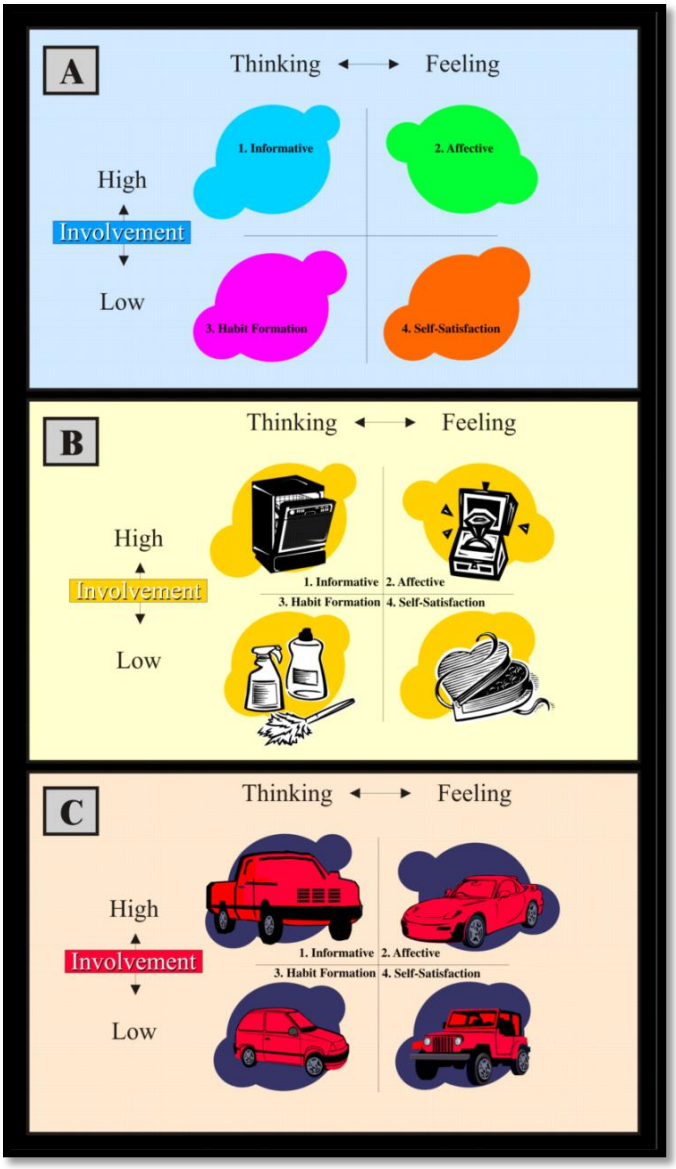
simultaneous models of processing information are among the most influential views when framing the paradigm (Holbrook & Moore, 1981). These differing views also affect how researchers evaluate consumers' judgments of pictorial versus verbal stimulus presentations in advertisements (Holbrook & Moore, 1981). Disagreement among researchers triggered so many new definitions that Rothschild (1984) called for a moratorium on efforts to redefine the concept and more time spent on collecting and analyzing data.

Involvement Theory within Consumer Research

Krugman (1965) first adopted the construct of involvement from social psychology and adapted it to consumer behavior to explain how viewers connect with television advertisements. He argued that viewers connect to television messages by the number of conscious connections or "bridging experiences" (p.355) they make with information. Since Krugman first used involvement theory in 1965, many other researchers have based their work on his assumptions in their efforts to explain consumer behavior (Petty, Cacioppo, & Schumann, 1983). When Krugman (1965) wrote his groundbreaking approach to involvement, he did not collect any data to test his proposition. His article was mainly a discussion of the various theories of the time and personal opinions influenced by his earlier research.

Using Krugman's conceptual framework of involvement theory, Vaughn (1980) developed a practical advertising planning model. The Foote, Cone, and Belding (FCB) model was created to make it easier for practitioners to develop persuasive messages. Even though the FCB model was conceived within the consumer sciences, the layout of the matrix also tried to capture and interpret the beliefs held by some scientists of how the brain functioned. The model that Vaughn introduced was simple enough for practitioners to both understand and use. This

visual matrix allowed practitioners to craft messages by using the involvement level of consumers as a guide according to different product categories (see Figure 1).



A. FCB model as originally conceived showing the strategies to follow given the various dimensions.
B. FCB model using different product categories.
C. FCB model showing varieties of same car product category.

Note. Adapted from "How advertising works: A planning model," by R. Vaughn, 1980, Journal of Advertising Research, 20(5), p.31.

Figure 1. **Foote, Cone, and Belding (FCB) model (Modified from Vaughn, 1980)**

Matrix A in Figure 1 shows how the FCB model has two continuums: one that measures level of involvement (vertical) and the other one that measures the type of involvement (horizontal). The two continuums together make four quadrants. Because the model assumes that different categories of products elicit different rational and emotional responses, developing the right message within this framework involves placing the product to be promoted in the appropriate quadrant.

Vaughn (1986) revised the matrix and proposed that product varieties within the same product category could be used to define the four quadrants. For example, Matrix B in Figure 1 shows how different product categories can be classified by using the type of involvement they elicit. The products within each quadrant vary mainly by the level of involvement required to make the purchase decision. However, Vaughn also tried to incorporate other learning theories popular with advertisers in order to classify products in the different quadrants. Big-ticket items like appliances, for example, are among the products that define Quadrant 1 because they tend to elicit more economic considerations. Cleaners are products that tend to be more habitual purchases elicit almost no economic considerations, and define Quadrant 3. Quadrant 2 and 4 are similar in that they elicit feelings. However, Quadrant 2 elicits ego-related impulses such as the desires satisfied by products like jewelry and cosmetics. Social products that provide simple satisfaction such as beer or chocolate define Quadrant 4.

Matrix C in Figure 1 shows how varieties of a single product category can also be classified within the revised FCB model (Vaughn, 1986). Automobiles are generally thought of as a product category that elicits high involvement and thought. Using vehicles as an example of a product category, Matrix C shows how different vehicles can be further classified into different quadrants. Different types of vehicles, such as heavy-duty, economy, sporty or suburban all-

terrain, can elicit not only different kinds of involvement, but also thinking and feeling reactions. As a result, different types of vehicles can fall in more than one of the four quadrants when only automobiles are evaluated within the matrix.

The FCB model can help advertisers characterize their consumers and target their messages. Given the variety and number of messages to which consumers are exposed, targeting the right messages to intended groups is important in order to make the most of advertising budgets (Siomkos, Rao, & Rauch, 1997). Vaughn (1986) developed a special scale to revise the planning model using 250 product categories among 1800 consumers in the United States. Additional data came from respondents in 23 other countries. However, there is little information in either the 1980 or the 1986 article as to how the data gathering process took place.

Petty and Cacioppo (1986) developed an alternative model that explains persuasion and information processing by individuals. These researchers postulated the Elaboration Likelihood Model (ELM) as an extension of their work based on their own understanding of both persuasion and attitude change within social psychology (Petty & Cacioppo, 1986; Petty, Cacioppo, & Goldman, 1981). An interest in persuasion by Petty and Cacioppo (1984) led these researchers to focus their attention on changes in attitude and thought in response to argument quantity changes. According to Petty and Cacioppo (1986), attitude change in highly involved individuals takes place when advertising arguments tap into their central route to persuasion, while less involved individuals use a peripheral route. Because they argue that personal relevance moderates attitude change, they manipulated involvement levels into high and low. They proposed that attitudes formed via the central route to persuasion are more predictive of behavior than attitudes formed via the peripheral route.

The ELM outlines how different elements such as cues versus quantity of arguments in mass media and advertising affect consumer behavior (Petty & Cacioppo, 1984). Extensions of the ELM have also been used to explain how attitude change can be achieved by using attractive and unattractive individuals as product endorsers (Haugtvedt, Petty, Cacioppo, & Steidley, 1988). Within this same understanding, the research has also extended to the analysis of the effect of endorser expertise on attitude change and persuasion (Petty & Cacioppo, 1984).

Although Petty et al. (1983) did not directly study the effect of images, they formulated inferences on their possible persuasive effects. They argued that an image could be central when these persuasive effects are relevant to the message, and verbal information could be peripheral when it invokes a simple decision rule.

Throughout their research on information processing and persuasion, their methodology varied little (Petty & Cacioppo, 1984; Petty & Cacioppo, 1986; Petty, Cacioppo, & Goldman, 1981; Petty, Cacioppo, & Heesacker, 1981; Petty et al., 1983). These studies used student samples and evaluated issues or advertisements that seemed relevant to these populations. Male and female students from undergraduate introductory level psychology classes participated in the studies. These students were divided into groups. Some groups would be led to believe that the scenario would affect them directly by the outcome of their opinion or choice using either strong or weak arguments. For example, some were told that academic changes underway at the university would require them to take a comprehensive exam (Petty & Cacioppo, 1984). Other groups would also read strong and weak arguments, but the outcomes would not have affected them directly either way. Students also evaluated a series of arguments that varied in message quality or source expertise. Other advertising studies used products that students would be familiar with such as razors and cameras to test attitude changes under similar laboratory

conditions. In order to hold involvement high, students were lead to believe that they would get an incentive from the brand of razor advertised. The results were analyzed using ANOVAs.

Over the years some researchers have interpreted Petty and Cacioppo's mixed findings to find more evidence to show support for the postulates for the ELM (Miniard, Bhatla, Lord, Dickson, & Unnava, 1991; Oh & Jasper, 2006). However, researchers like Cole et al. (1990) were not able to show support for the ELM. While some researchers like Scott (1994a) have criticized problems with the methodology, others like Crimmins (1997) have summarized key problems with the ELM. Crimmins' summary not only sheds some light on some of the shortcomings of the model beyond a laboratory setting, but may also help to better understand and interpret the results of those who have directly studied the role of images and involvement.

According to Crimmins (1997), a leading problem for external validity is that in the methodology subjects were generally divided into high and low involvement by making them believe that the advertisements were immediately relevant. Many scientists and practitioners seem to agree that advertisers do not really have that ability, so it is wrong to assume this. Designating the level of involvement also goes against the understanding that involvement is measured on a continuum. Another problem Crimmins noted was that "the difference between central arguments and peripheral cues seems arbitrary and largely a matter of perspective" (p.99) and results in concepts that "lack a clear workable definition" (p.97). Consequently, it is not clear how they identify and use central (self-conscious) and peripheral (subconscious) arguments to develop persuasive messages. Crimmins also suggests "Petti and Cacioppo's (1983) distinguished central arguments from peripheral cues in somewhat circular fashion" (p. 96). For this reason, Crimmins is among the few who has talked about the lack of evidence that Petti and Cacioppo's experiments provide for their theory.

Because there is disagreement as to the many types of involvement, O'Cass (2000) suggested that it is better to think of involvement as "relatively stable whilst still allowing for fluctuations in certain underlying components" (p. 550). As a result, involvement can become a state of overall involvement where the interaction among different objects can be studied as contributing to the profile of involvement. O'Cass believes that high consumer involvement "implies a positive and relatively complete engagement of core aspects of the self in the focal object, whereas very low involvement implies separation" (p.552). According to O'Cass, involved consumers also perceive the "potential for satisfying salient higher order psychological needs" (p. 552) of the products and the contexts important to the lives of most consumers. For this reason, he argues that product involvement is not the "sudden interest in a particular situation with a product" (p.550).

Measuring Involvement

Many different scales have been developed to measure involvement (O'Cass, 2000). Researchers have suggested the need to develop a convenient measure for practitioners to use as their primary reason to develop and improve such scales (Laurent & Kapferer, 1985; Zaichkowsky, 1985). In 1985, studies emerged that have had long-term influence on researchers' views on scale development for involvement measurement.

The idea of a Consumer Involvement Profile (CIP) emerged as a result of a series of studies by the team of French researchers Kapferer and Laurent (Kapferer & Laurent, 1985a, 1985b, 1993; Laurent & Kapferer, 1985). Through their years of working together, Kapferer and Laurent (1993) strongly believed one index of involvement was not appropriate to measure the state of involvement. Instead, they argued for measuring this state by assessing several facets or antecedents of an involvement profile as they believed that a profile of involvement resolved the

many distinctions researchers made between different types of involvement such as situational and enduring (Kapferer & Laurent, 1985a, 1985b, 1993; Laurent & Kapferer, 1985). According to their evidence, a profile could better measure the facets along the same construct of involvement that corresponded with the perceived characteristics of involvement (Kapferer & Laurent, 1985a, 1985b, 1993; Laurent & Kapferer, 1985). Using evidence collected from their studies, Kapferer and Laurent suggested that no single facet can predict involvement. For this reason, they strongly proposed the view that multiple facets help to determine the value of certain product benefits and the role they play in satisfying consumers. This information can then be used to predict consumer behavior.

For example, Laurent and Kapferer (1985) discussed how products like soap have become highly involving because marketers have bolstered the desirability of fragrances and sensual qualities of soap beyond its utilitarian function of cleaning thus creating more overall value to consumers. Consequently, the dynamic function of all the facets of their scale: perceived importance, perceived risk, symbolic sign or value, and hedonic value help explain involvement (Laurent & Kapferer, 1985, p.43). The facet of perceived risk has two facets of its own: perceived importance and probability (Laurent & Kapferer, 1985, p.43).

In order to generate an initial pool of items, Laurent and Kapferer (1985) used in-depth interviews with two sets of 100 French housewives as test samples. Then, they tested their model with another sample of 207 French housewives who provided information during face-to-face interviews on fourteen product categories based on demographic characteristics such as age and socioeconomic status. Using a 5-point Likert-type scale, respondents gave their level of agreement with a multi-item scale for each facet of involvement. In order to get a variety of different products in each category, the researchers asked the housewives to give them “what

typical product came to mind among four categories (food, durable, textile, and drugs)" (p.43). Researchers used Crombach's alpha to test the internal consistency of the scale and factor analysis to test the trait and discriminant validity of their scale.

Apparel and textile researchers have used the Laurent and Kapferer involvement scale to understand consumption profiles for intimate apparel. Hart and Dewsnap (2001) found that the Lawrence and Kapferer involvement scale was useful when studying involvement with intimate apparel because these garments are virtually invisible and highly personal. Consumers of intimate apparel such as a bra, usually have to change styles throughout many stages of life not only because of body changes, but also because manufacturers change the styles, sizes, and materials. Besides lifestyle changes that had been documented in the literature, Hart and Dewsnap found the Lawrence and Kapferer's involvement scale helped to better explain the psychological complexities of consumers in the process of purchasing and satisfaction of this apparel category. For example, the instrument not only seemed to capture consumers' high level of involvement with bras, but also where consumers differ in the level of risk and pleasure they get from these items.

Using this understanding, Hart and Dewsnap (2001) took a purposive sample of 48 middle-aged women in the United Kingdom that met not only "4 key variables: age, bust size, socioeconomic group, and geographic location" (p. 112), but would have also "established their bra buying experience, attitudes, and beliefs" (p.112). The women were subdivided into three focus groups with 8 participants according to age. These three groups were as follow: 35-44, 45-54, and 55-64 because women would not only have achieved physical maturity of their breast size, but would have also experienced similar life changes the various stages of their lives. The women took the Laurent and Kapferer scale as part of the exercise where trained interviewers

lead the session with each group. Hart and Dewsnap found that risk associated with mis-purchase of a bra increases the level of involvement with this apparel product. Mis-purchase of a bra can only be gauged after the bra has been worn and washed; as a result, there is high risk in failing to get a return for a fairly expensive product. Across brands, there are styling and sizing differences that also influence a high level of involvement and high level of risk for mis-purchase.

Zaichkowsky (1985), like Laurent and Kapferer (1985), wanted to develop one simple scale that could be used to measure different types of involvement. Based on her research, she published the Personal Involvement Inventory (PII) in 1985. However, unlike the profile developed by Laurent and Kapferer (1985), she argued that her measure of involvement was sensitive to the three categories that affect a person's level of involvement: personal, physical, and situational. She developed these categories based on earlier studies by Bloch and Richins (1983) and Houston and Rothchild (1978). These researchers proposed that inherent interests, object characteristics, and temporary relevance influenced all types and levels of involvement.

Zaichkowsky (1987) provided evidence to support the effectiveness of her scale. She recruited 230 undergraduate and graduate business students of both sexes to test two product categories from each quadrant of the Vaughn (1986) matrix: (1) automobiles and personal computers, (2) diamond rings and cologne, (3) ground beef and paper towels, and (4) chocolate and cigarettes (Zaichkowsky, 1987, p.33). These respondents rated each item on the 20 item bipolar scale during the first 10 minutes of class. Across both graduate and undergraduate students the scores obtained revealed that the only significant differences were for diamond rings which undergraduate students perceived as more involving. Next, Zaichkowsky used factor analysis with a varimax (orthogonal) rotation "to pull the groupings of adjectives as far away as possible" (p.34). Then, she plotted the products in a matrix like Vaughn (1986). Surprisingly,

chocolates did not register in the low involvement affective quadrant as expected. Among women, these shifted to the thinking or habitual space. Unlike women, men were neither as involved with diamond rings nor with cologne.

Questions over the PII scale's length, validity, and robustness, moved Zaichkosky (1994) to provide additional empirical evidence to reassure researchers that her scale could capture both affective and utilitarian levels of involvement when used to segment consumer groups in response to an advertising message. She also shortened the measure. Students helped to develop and test the scale in order to assess internal reliability and test-retest reliability. Additional data provided from 1994 show evidence to suggest how involvement is personal and that measuring involvement with an advertisement is related to a person. Expert judges in the field of advertising provided the evidence. Judges read and categorized the responses of subjects to an additional question. The question asked subjects, who had rated a print advertisement for Lean Machine Exercise equipment, a radio advertisement for Pepsi Cola, and a television advertisement for Edy's ice cream was "Now we would like you to state, in your own words, why you rated each ad as you did" (p.62). While the judges did not see or hear any of the advertisements, they categorized responses into: low, medium, and high according to the respondent's level of involvement.

Flynn and Goldsmith (1993) used Zaichkowsky's PII scale to discuss how it could be used successfully to measure and reveal important information on consumer behavior. The version of the scale they used was based on a 1987 working paper by Zaichkowsky. From the citation and reference, it seems that this paper became the basis for Zaichkowsky's 1994 article. Their research on travel services and fashion products looked at involvement not only as mere interest by consumers in a service or product category, but also as enduring enthusiasm toward

services and products that persists as feelings of personal relevance. Respondents to the survey were adults who were participants and exhibitors attending a senior citizen showcase. The questionnaires given to these participants solicited their involvement with travel services and fashion. Although this was not a random sample, the women who participated in this study represented a cross section of the adult female consumers with reported household incomes of around $40,000. The median age of these women was 37 years with a range for the sample of 20 to 77 years. Because the primary interest was to evaluate the PII, the researchers conducted several tests. The coefficient alpha of 0.92 and an exploratory factor analysis performed indicated consistency and dimensionality of the PII.

The Flynn and Goldsmith (1993) study is valuable also because it provides insights into how the PII can be used to understand fashion involvement. Their findings revealed fashion spending is correlated to fashion involvement; time dedicated to searching for fashion clothing is correlated to fashion involvement; and shopping for fashion and fashion involvement are also correlated. Women, who were high in fashion involvement, also were more likely to read more about fashion, seek out fashion featured in the media, and reported spending more time in the stores of those fashions publicized. Highly involved fashion consumers also seemed to seek products that had style and were less interested in shopping for bargains or sales. While income seemed to explain some consumer behavior, other demographic variables such as education and age were not as useful as involvement. In addition, there was evidence to suggest that liberal return policies minimized the risk for mis-purchase among less involved consumers.

McQuarrie and Munson (1987) viewed Zaichkowsky's PII as an important step toward measuring involvement. However, McQuarrie and Munson believed in purging some of the items from the scale. Some of their criticisms proved important as they lead Zaichkowsky to

further revise her scale. For example, they argued that the scale contained adjectives "normally associated with the measurement of attitude" (p.36). As a result, there was "attitudinal contamination" (p.36) that "can be expected to overestimate consumer's involvement with certain types of products" (p.37). Consequently, consumers would be wrongly classified as involved with products that they just like, but they have not experienced.

McQuarrie and Munson also thought that Laurent and Kapferer (1985) had presented a strong model because the facets of involvement are "all plausible sources of a greater or lesser degree of arousal" (p.36) that according to Cohen (1983) was a fundamental constituent of the state of involvement. In order to resolve these concerns, McQuarrie and Munson (1987, 1992) combined the Laurent and Kapferer (1985) profile and Zaichkowsky's PII scale into the Revised Personal Involvement Inventory (RPII). Using student samples, McQuarrie and Munson (1987, 1992) asked respondents to evaluate their involvement with a variety of products using the PII and RPII to test the scales.

Because there is still little agreement as to what measures to use to assess involvement, some researchers have used all or part of the McQuarrie and Munson scale in their studies. For example, Lynch and Beck (2006) used 4 items of the McQuarrie and Munson scale in the research to profile internet buyers in 20 countries. The scale was used in full by Winzar and Ho (1998) to compare the effects of web and print media on brand attitude, emotional response, and behavioral intention. However, until 1985 no one had used McQuarrie and Munson to research fashion involvement (Fairhurst, Good, & Gentry, 1989)

Although these different measurement scales have been useful in the operationalization of involvement, many more measurement scales have been developed to support individual researchers' views of involvement. These additional scales have not escaped from criticism

(Higie & Feick, 1989). However, the work of Laurent and Kapferer (1985) and Zaichkowsky (1985) has been widely reviewed and cited relating to the development of involvement scales. Bearden and Netemeyer (1999) included the Laurent and Kapferer (1985), McQuarrie and Munson (1987), and Zaichkowsky (1985) scales in the Handbook of Marketing Scales because these scales met certain relevant criteria: (1) theory driven, (2) measure had at least three items or questions, (3) measure had been used in marketing research, (4) some scaling procedures were employed, and (5) estimates of reliability and/or validity existed. Other criteria were also used to exclude measures from the book.

Fashion Involvement

Innovativeness, opinion leadership, and enthusiasm are some of the common characteristics of those consumers who experience long enduring involvement in certain product categories. Fashion involvement has been recognized as one of those categories that attract deep enthusiasm of many consumers (Bloch, 1986). Enthusiastic consumers of fashion are not only attracted to fashion because it satisfies utilitarian, functional, pleasure or self-expressive needs, but because it arouses a continuous and active attraction over time. The enduring attraction keeps consumers focused and motivated to keep up with changes. For this reason, researchers studying consumers' behavior toward textiles and apparel products adapted the concept of involvement to determine how consumers' fashion involvement influences their processing of information about apparel products and the subsequent purchase behavior.

Although Zaichkowsky's (1985) scale was used in the mid 1980s to measure fashion involvement, Tigert, Ring, and King (1976) had already developed the Fashion Involvement Index (FII) almost 10 years earlier as a measure to understand consumer behavior toward apparel. Within the theoretical and methodological conceptual framework operationalized by

fashion adoption theory, their FII provides a better understanding of how fashion innovators and leaders process information. Their research findings also provide some perspective into what motivates fashion leaders and followers to share information and thus influence the behavior of other consumers. Fashion innovators are important because early adoption of new fashions provides revenues that help fund development costs (Goldsmith, Stith, & White, 1987).

The concept of fashion involvement, as proposed by Tigert et al. (1976, 1980), has several dimensions related to behaviors and activities exhibited by fashion leaders when purchasing apparel, such as a tendency to tell others about new fashions. Fashion innovativeness and time of purchase, fashion interpersonal communication, fashion interest, fashion knowledgeability, and fashion awareness and reaction to changing fashion trends are the five dimensions they proposed that make up fashion involvement. The FII is among the most widely reviewed scales for those studying involvement and those interested in measuring the effects of enduring involvement (Higie & Feick, 1989). This scale has also been included by Bearden and Netemeyer (1999) in their listing of scales.

Ring (1977) used the Fashion Involvement Index (FII) in his dissertation work to define a profile of the male consumer. Building on the views of King, his major professor, that the "trickle down" (p.20) theory of the fashion adoption process that dominated pre-1963 thinking, Ring also argued that certain segments of adult males can be fashion change agents in the fashion adoption process. Until then, women and undergraduate students, both male and female, had been studied, so Ring wanted to profile adult males. To this end, he developed and administered an eight-page survey to 1,025 adult male heads of households in the metropolitan census areas of Toronto and Ontario, Canada. Data analyses included correlation, regression, factor and discriminant analyses. His findings suggest there is enough evidence to differentiate adult male

consumer behaviors in terms of their fashion involvement. In addition, these male adults held distinct impressions of retailers when compared to mass-market consumers that offered implications for marketers.

The attractiveness of gay professionals in terms of education, occupation, income, spending power and even lifestyle characteristics has attracted the interest of apparel retailers towards understanding the purchasing preferences and consumer behavior of this consumer group. In order to assess the importance and influence of the male homosexual market segment, Sha (2004) in her exploratory study used a convenience sample and both qualitative and quantitative techniques. Part two of the research was quantitative and involved a self-administered survey from a convenience sample of 145 respondents. The survey used the Fashion Involvement Index (FII). The researchers also collected demographic information. Researchers collected additional data from (1) subjects enjoying events surrounding the Gay Pride Parade held in Toronto and (2) cold calls and e-mails to members of gay organizations and their friends.

This research illustrates another way that the FII has been used and applied to analyze a consumer group's level of fashion involvement. The scale allowed researchers to understand how gay professionals perceive themselves when compared to other men and women. Researchers took the sum of the scores according to Tigert et al. (1976) by adding the total from each respondent. This yielded a sum score mean value of 11.2. Overall, this score falls around the middle of the scale. For this reason, they concluded that most gay professionals in this sample were moderately involved with fashion because they compared this value to the directions of Tigert et al. The range of scores is 5 and 17. According to this scale, those who are low involved have a score between 5 and 8; moderately involved have a score between 9 and 13;

and those highly involved have a score between 14 and 17. The four dimensions of the scale allowed researchers to describe this group when they compared themselves to other men and women. Each dimension of the FII also allowed the researchers to understand how (1) fashion innovation, (2) interpersonal communication through fashion, (3) fashion interest, (4) fashion knowledge, and (5) fashion awareness could be used to describe this consumer group. Interestingly, 22.1 % saw themselves as early adopters, 46.9 % reported being more fashion interested, an equal percentage were fashion knowledgeable, and only 5.5% reported keeping up regularly with fashion news. However, most respondents indicated they kept up with the trends.

A study by Fairhurst et al. (1989) revealed that the PII developed by Zaichkowsky was applicable to measuring involvement with women's apparel by investigating its convergent validity with other two fashion involvement measures that included the Tigert et al. (1976) FII, and an adaptation of a set of 45 lifestyle characteristics. Additional questions provided information on evaluative criteria consumers use when considering stores. Using a purposive female-only sample consisting of two groups: (1) specialty store customers and (2) students from a Midwestern College of Home Economics, the study had a total of 220 completed questionnaires for group 1 and 113 for group 2. The researchers found that the Zaichkowsky scale was a reliable and valid measure of involvement with women's apparel. Results also showed that the FII was unidimensional supported by findings of a single factor in both groups. Although Fairhurst et al. did not test the McQuarrie and Munson (1987) scale, in their conclusion they recognized its importance and possible contributions to the understanding of involvement with apparel. Because of the socialization process and the resultant decision risk when making apparel choices, Fairhurst et al. believed that the modified PII that McQuarrie and Munson

(1987) proposed would be a better measure to tap into dimensions of apparel specific to the apparel consumer.

Others like Thomas et al. (1991) have tried to expand the concept of fashion involvement by studying the underlying dimensions of apparel involvement in consumers' purchase decisions. A final sample of 177 female shoppers recruited from area malls participated in their study. These women participated in the take-home survey they returned by mail after they completed it. The research instrument consisted of an involvement measure, a fiber information source measure, and a demographic measure. The apparel involvement scale was adapted from Traylor and Joseph (1984). Using factor analysis, these researchers determined that fiber content and performance characteristics are additional elements of apparel involvement influencing the purchase decision, thus confirmed their supposition of the multidimensionality of apparel involvement. They believe that two important dimensions of apparel involvement are the use of "Dress to Express Personality and Dress as a Signaling Device" (p.47). An important finding of this research suggests that media plays a big role in influencing the meaning that dress has been used as a signaling device. Apparel consumers also seem to use both marketer-dominated and non-marketer dominated sources of media both jointly and independently to make inferences as to what dress means.

Kim et al. (2002) developed an advertisement for a fictitious brand of T-shirt to research the concept of apparel involvement. The study used a convenience sample of 274 male and female students from an undergraduate population attending classes in marketing, sociology, and political science in a Midwestern university. Most of the participants, 85%, were under age 25. These participants reviewed an advertisement for a fictitious brand of T-shirt that included facts such as fiber type, color, size availability, and price information. Although the product chosen

was one with which most undergraduate students would be familiar, the researchers acknowledge that it is not the most fashion forward of all types of garments. Kim et al. used Zachkowsky's Personal Involvement Inventory (PII) three times in order to measure three dimensions of apparel involvement: (1) fashion, (2) comfort, and (3) individuality. In addition, based on their literature review, they adapted measures to determine product attribute beliefs using a multi-item scale. Using structural equations modeling (SEM), researchers tested their causal model. Their results showed that among women, fashion involvement individuality was strongest in shaping apparel involvement. In contrast, men indicated that comfort seemed to play the strongest role in shaping their apparel involvement. These finding are similar to others that have found women and men differ in their level of apparel involvement. Researchers believe that gender differences exist because women are socialized differently. For this reason, in this study women did not see T-shirts as fashionable or items that convey individuality. The researchers concluded that the level of product involvement influences how consumers form beliefs of advertised product attributes. In addition, the authors suggest the need for more studies of different advertising strategies.

Apparel products are material goods produced and exchanged within the context of a consumer culture and the acquisition and possession of such material goods carries value to consumers. Although most products have life cycles, apparel products have more distinct and visible cycles where consumers adopt and dispose of these products (Sproles, 1981). For this reason, level of fashion involvement by itself continues to be useful in understanding the consequences of consumer knowledge and interest in fashion. The level of knowledge and understanding of the value of such possessions to consumers and their fashion involvement seem to influence the decisions women fashion consumers make about these goods (O'Cass, 2001).

Implications of Contrasting Views

A major limitation of involvement studies has been the almost exclusive use of students as the test population. Although models like the ELM have endured, most research to test these models used experimentally-based designs in laboratory settings (Laczniak & Teas, 2001). Scott (1994b) disagrees with some of the findings of ELM studies. She proposed that the underlying assumptions of involvement theories based on philosophical traditions of information processing truncate the understanding of how advertisements are read (Scott & Batra, 2003). As a result, she and others like McQuarrie and Mick (1996, 1999) have tried to analyze highly visual advertisements using other disciplines such as semiotics.

In recent years, the methods used to test and analyze elaboration have fallen into disfavor among social scientists. These models have used four or higher order factor interactions using ANOVA which some researchers have found to be inappropriate (Umesh, Peterson, McCann-Nelson, & Vaidyanathan, 1995). Social scientists like Cohen (1990) have suggested that researchers using elaboration theory have tested too many variables thus greatly increasing the chances of finding significant differences where none might exist.

Psychology has been used to understand information processing and consumer behavior. However, some of the interpretations adopted from this discipline to understand consumer behavior are simplistic because they favor views of learning and behavior that tend to overestimate the impact of attitude change as a result of a reactive system of rewards and punishments. These interpretations have also diminished the way in which images are perceived and understood within communications theory (Scott, 1994a).

Classical learning and hemispheric lateralization theories have often been used to develop assumptions about how the brain processes different types of information in advertisements

(Janiszewski, 1990; Lutz & Lutz, 1978). However, new tools to assess brain function have produced results that challenge previous assumptions on how the brain processes information. Some scientists now believe that it is too simplistic to link one side of the brain to only certain types of information processing, such as advertising copy, and not others, like images, as lateralization would suggest (Martin & Klecker, 1990). They believe that the brain is flexible, and early studies on lateralization theory were deceptive because they were performed with patients who had severe brain damage. Even consumer researchers like Rothchild (1984), who influenced the assumptions of many researchers including Zaichkowsky, have acknowledged that lateralization is an extremely complex subject. Despite the findings that the brain is flexible and cognition is more abstract, it appears researchers cannot effectively extrapolate this information into other areas such as consumer theory (Shanteau, 1983).

Researchers like Vaughn (1986) have acknowledged the possible impact of discoveries in neuroscience on the reframing of the underlying assumptions of involvement. However, other researchers have been slow to change their views. Most have been influenced by the comparisons of the brain to how computers processed information (Harris, 1983).

Psychological theory has also sustained advertisers' views that images work in communication as triggers of memory and recall. However, these views are changing. Some researchers now believe that simply recalling information from memory is not enough to indicate persuasion when there is no information processing (Monroe & Lee, 1999). Consumers may interpret visual information about products because they also negotiate the meaning of cultural and social symbols (Kaiser, Nagasawa, & Hutton, 1995). This is an important implication for assumptions drawn on the basis that consumers actively engage in making socially appropriate purchase decisions.

Many researchers have come to realize that the difference between images and copy might just be philosophical. For the most part, the exploration of persuasion has been guided by tradition. Interpretations of classical theories from philosophers such as Aristotle and Plato have often been used to develop explanations of the effects of arguments and speaker presentation on persuasion (Winkielman, Schwartz, Reber, & Fazendeiro, 2003). As a result, some researchers now believe that images are as important as text in communicating issue-relevant information, but more studies are needed in order to develop the rhetoric understanding in this area (McQuarrie & Mick, 1999).

Personal Relevance

Personal relevance drives involvement (Zaichkowsky, 1985). The enduring personal relevance with apparel may help explain why fashion involved consumers are more willing to engage in pre-purchase activities such as information processing of advertisements that may also influence others' behaviors (O'Cass, 2000). Attention to how these consumers attend to social cues has also been thought to contribute significantly to their ability to process information (Bearden & Rose, 1990).

Among luxury fashion consumers of apparel, social acceptance of the product has been found to be an important predictor of consumption (Belleau, Nowlin, Summers, & Xu, 2001; Summers, Belleau, & Xu, 2006; Xu, Summers, & Belleau, 2004). Alligator leather apparel, for example, is both luxurious and fashionable, but some consumers perceive it as socially unacceptable (Xu, 2000). Thus fashion products can be both controversial and highly desirable among consumers. There is a need to better understand how images in advertisements for these products might influence information processing (Santaella, 2001).

The success of the marketplace has changed the American scene. Goods have adopted meaning beyond their utilitarian function (Levy, 1959). Individuals purchase fashion for their symbolic value. Consumers use dress to express their individuality and to indicate their social worth or status (Barnard, 2002). Fashion apparel also allows consumers to experiment with different social identities. These personas provide social information about the multiple personalities of the wearers as they try to differentiate themselves from others (Levy, 1982). As the consumption of these subcultural innovations influences some fashion cycles, mass adoption of politically correct fashion might be influenced by values such as those advanced by activist groups and thus also influence the perception of social risk. For this reason, social acceptance may be used to better understand how images in advertisements for these products may influence information processing and the facets of involvement. Xu (2000) used a measure of social acceptance for apparel made with exotic leather, a product considered controversial by some consumer groups.

Images in Information Processing Theory

Scattered within research in the information processing literature are a limited number of studies that have examined the role of images in advertising. While images are not always the central focus of all these studies, many have influenced the current understanding and theory development of the role that images play in advertisement. However, some of their conclusions may not be generalizable because their experiments used convenience samples. Consequently, the frameworks used for understanding the effects of advertising exposure on choice have considered the role of images within a perspective of traditional learning theories that may not be completely predictive of consumer behavior.

An interest in understanding how consumers perceive and code brand information led researchers like Mitchell and Olson (1981) to study the effects of images in advertisements. Internal evaluations of brands have been an important topic of concern for these researchers. As part of their study of attitude and beliefs toward brands, they examined the different effects of verbal (copy) versus visual information in advertisements for branded products. In order to test their assumptions, the researchers developed four advertisement treatments in an experiment where only one advertisement had verbal information (copy) about a product characteristic. Except for the hypothetical brand and product names for facial tissues, the other three advertisements contained only visual information. Subjects viewed photographs of advertisements that varied subjective and objective information content about the product. Subjects included 71 junior and senior undergraduate students recruited from an introductory marketing class. Both female and male students participated in one of four experimental sessions that lasted 45 minutes in return for a small compensation. The final number of students in each group was 21, 19, 17, and 14 respectively. Researchers did not presume a bias as to student group assignment.

The experiment took place in a large room where subjects were seated at tables and saw projections of the advertisements designed to look like partially completed print advertisements. The images in the advertisements were: (1) an image of a kitten, (2) an image of a sunset, and (3) an image of an abstract painting. The order of the advertisements changed for each group. In order to substitute for real brand names, researchers used the word "Brand" and the letters "I, J, L, and R" (p. 321). The researchers believed that the advertisement with the image of the kitten communicated the specific attribute of softness. The fourth advertisement included verbal (copy)

information about the product only in the headline with an explicit claim of softness. In the other advertisements, copy was only simulated.

Their analysis used ANOVA, ANCOVA, and regression. Researchers stated that their dependent variables were "commonly measured in consumer research" (p. 323). For this reason, there was no mention of a specific scale. However, the researchers measured beliefs and attitudes for brands and purchasing intentions of products using Likert-type items. Findings indicated that respondents formed different beliefs about different brands. Researchers also found that respondents' ratings were positive for the advertisements containing the visual stimuli of the kitten and the sunset. Findings also lead them to conclude that visual manipulations had significant effects on the strength of beliefs about product attributes, attitudes toward the brand and the act of buying the brand, and even purchase intentions. Other analysis suggested that visual stimulus influenced the general liking of the advertisements. In their discussion researchers highlighted that repetition did not seem to have an effect on more positive attitude. Respondents seemed to have made inferences and formed rather different perceptions of the four brands due to the use of visual information. For example, respondents took the picture of the sunset to mean that the product came in different colors. In addition, they made inferences about other characteristics such as absorbency when there was no related information provided.

In a later study, Mitchell (1986) revisited the effect of verbal and visual components of the advertisement paradigm. The dependent measures for the study were brand attitudes and product attribute beliefs. Based on two criteria: (1) products with which undergraduates would be familiar and (2) products that had a small number of salient attributes, several products were selected: (1) toothpaste, (2) ballpoint pen, (3) cola, and (4) deodorant. Photographs in the

advertisements were pre-tested and chosen as treatments because they differed in three affective ways and consistently tested to be: (1) positive, (2) neutral, and (3) negative.

The convenience sample used in Mitchell's study (1986) included 69 junior and senior undergraduate students recruited from business classes and signs placed on a university campus. Both female and male students participated in the study for a small compensation during convenient times for them. The researchers lead respondents to believe that large companies wanted their opinions because they wanted to test market their products.

Students saw the advertisements on a screen in random order. A filler task followed. Upon completion of this task, students responded to a questionnaire to obtain overall attitudes. The researchers explained that it was important to measure their attitudes before the students had a chance to write down everything that came to mind about each product they had just seen. The second portion of the study was intended to measure actual associations between brands and concepts. Next, students wrote for each product a particular attribute they thought was important. After they had completed this task, they rated how much the products advertised had this attribute. Students also wrote down their likelihood to purchase each of the advertised products. Then, students completed several measures to obtain attitudes and beliefs towards the advertisements and the products advertised. Finally, students gave their thoughts on the purpose of the experiment.

Data were analyzed using ANOVA. Findings indicated that visual elements of advertisements affected brand attitudes because individuals make inferences that resulted in the formation or change of beliefs. These findings are similar to those found in Mitchell's earlier study (Mitchell & Olson, 1981). Verbal information (copy) in advertisements seems to have the

same effect as visual according to Mitchell's evidence. He also argues that images did not distract information from the main message.

From the perspective of Edell and Staelin (1983) the role of images had intrigued researchers because previous studies had documented how individuals were consistently better able to recall advertisements with pictures. However, they argued that more research was needed to better understand how consumers learn about brand information from advertisements that used images. This led Edell and Staelin to test a model to explain how consumers processed brand information from pictures in print advertisements.

Edell and Staelin (1983) also believed that images might distract viewers from their brand learning task and thus offer different insights when looking at pictorial versus verbal advertisements. They wanted to find evidence to suggest images and not verbal formats activated previous information stored in memory. For this reason, they tested a methodology to search for differences in cognitive processing of a message such as different beliefs, attitudes, or intentions among consumers.

Their experimental design varied advertisement structure: (1) verbal (paragraph only), (2) pictorial framed (picture and paragraph in combination), and (3) pictorial unframed (unlabeled picture); content: (1) objective (when ad conveyed factual information), (2) subjective (when ad conveyed an individual characterization of an attribute liked), and (3) characterization (when ad had paired message with a positive message); and product class or category: (1) car, (2) camera, and (3) calculator. Each subject saw an advertisement from each structure, content, class condition, and two extra filler advertisements.

A pretest was used by researchers to select the pictures that conveyed the desired consistent number of messages. The researchers did not elaborate as to how they drew their

sample for their subjects in the pretest or in the actual experiments. They did provide a description of the characteristics their subjects had to have in order to participate and how they were contacted. "The subjects used throughout all phases of the study varied in age between 20 and 28" (Edell & Staelin, 1983, p.50). In addition, "subjects were telephoned three to seven days before participating in the main experiment" (Edell & Staelin, 1983, p.50). The procedure allowed researchers to determine attributes that the subjects considered important for brands and products to have within each of the product class categories used in the experiment. For the main experiment there were 27 subjects. The actual laboratory test took place at the Consumer Behavior Laboratory of the University of Chicago. Under this controlled environment, researchers were able to record the eye movement for 9 participants. At the laboratory, all subjects performed a main task individually, viewed the printed test advertisements, and completed a nonsense task. When they finished, they told interviewers everything they thought was true about the brands for the advertisements they viewed to ascertain knowledge, interest, and number of previous purchases. Of the respondents, 14 were asked to write everything they could recall about the print advertisements they had just viewed while the remaining 13 responded to a different set of questions regarding information about these print advertisements. Three independent judges classified the responses of the subjects into three different categories according to how the judges perceived respondents' written thoughts supported, showed indifference, or refuted the advertisement's message. There was no disagreement among the judges.

Results of the study found that distraction and or forgetfulness seemed to interfere with respondents' processing behavior for unframed pictorial advertisements. Consequently, many respondents had fewer evaluative (positive or negative) thoughts of the brands advertised in

these advertisements. Although respondents shared which attributes they used when purchasing products in the category, it seemed as if they did not use those attributes when reviewing the advertisements. Respondents could not remember the brands either. There were no significant cognitive differences among brands on any measures between the pictorial framed advertisements and the verbal advertisements. Researchers expected to see more positive attitudes or more counterarguments for brands. They suggested the lack of differences might have resulted because their images and verbal information treatments were congruent. In addition, researchers found that when the message was more objective in nature, respondents gave more arguments in support of the message. The characterization treatment generated little evaluative thoughts. Although not statistically significant, the recall measure showed how brands are better recalled when picture advertisements are framed with arguments.

Pictures in advertising have been generally considered attention-getting devices, but some researchers have explored pictured-based persuasion and the moderating role of involvement like Minard, Bhatla, Lord, Dickson, and Unnava (1991). Using a sample of 84 male and 84 female students from an undergraduate marketing course, the researchers asked the students to evaluate advertisements for a fictional brand of soft drink, "Sunburst." The students were subdivided in groups of 6-10 where some were led to believe that they would receive a product of their choice as additional compensation for their participation. Minard et al. (1991) manipulated the relevance of the message by using different: claims: (1) strong and (2) weak; images: (1) attractive and (2) unattractive images; and the level of involvement: (1) high and (2) low in order to understand how pictures influence: the (1) evaluative or affective responses, (2) judgments about picture appropriateness, and (3) imagery evoked. The pictures they used next to the soft drink included: lizards, palm trees, dogs, and orange slices. The statistical analysis used

2 X 2 X 2 ANOVAs. Although their studies produced marginal results, there was evidence to suggest that attractive and product relevant images contributed to higher elaboration especially among highly involved respondents. However, their discussions also suggested that more research is needed as consumer's personal levels of involvement might affect how some view and interpret images. Additional discussions on appropriateness and relevance of pictures revealed that the instruments used might not have been able to measure such structures. Overall, Miniard et al. findings showed that consumer recall of verbal advertisements tended to decay faster from memory. Although both verbal and visual advertisements were both likely to be processed, audiences preferred the visual versions. These findings are important, but should be approached with caution. Some of Miniard et al. discussions are based on the interpretation of "marginally" significant, values of *p* that are high ($p < .10$) and thus not significant. In addition, they also used three way interactions. Some of researchers are now discouraging analyzing interaction with ANOVA as the likelihood to erroneous significance increases with more interactions in the analysis (Cohen, 1990).

According to Holbrook and Moore (1981) consumer evaluations of products that require not only judgments of utilitarian features, but also aesthetic and symbolic features have visual appeal that may be better explained by other psychological models. Female and male students in an MBA class were assigned at random to evaluate verbal and schematized black and white line representations of sweaters. These 59 students judged 20 pairs of adjectives based on a scale developed by Osgood, Suci, and Tannenbaum (1957). Results offered support for the presence of significant moderating effects of different input formats. Findings seemed to suggest that pictures tended to elicit more integrative mental processes than words alone.

A major area of study in advertising research has been the use of images as cues that help consumers recall information from memory. The study by Unnava and Burnkrant (1991) suggests that highly involved consumers can recall information that is presented verbally if claims allow consumers to evoke images. For this reason, the researchers argue that the value of using verbal information may be better than text alone. However, they also found that when both images and verbal information within the advertisements are consistent, respondents were more likely to recall information. A convenience sample of undergraduate students in an introductory marketing class evaluated advertisements for fictitious new products within product categories that would be relevant to their demographic characteristics. Although the 107 undergraduates viewed several print advertisements, only one advertisement was manipulated within a session. The treatment advertisement was for a camcorder. At the end of the session, students were asked a series of questions about the manipulated advertisement. Students returned within a few days to claim their incentive and to answer recall questions about the ads they saw.

Although many years have passed since Childers and Houston (1984) offered a review, a discussion, and a quick overview of some of the different conceptual frameworks that consumer behavior researchers could take into consideration when considering the visual versus verbal paradigm, their observations may still be relevant today. Because they understood that images have been constantly found to aid in the learning and retention of product information, they encouraged researchers to search for reasons as to why the inclusion of pictures improves the effectiveness of the advertisement. Their review of literature lead these researchers to believe that visual information stimulates cognitive processes that may allow marketers to tap into differing informational processing behaviors of visual versus verbal information. Childers and Houston use the term “imaginal” (p.60) to describe the cognitive process that consumers use to

code and store information memory through association that give images their meaning without having to be consciously experienced. The argument for this process is that consumers when looking at images often can draw a mental picture because these images tap into a different process of learning that allows for a more effective memory system. Thus it is easier for consumers to incorporate different sets of elements into a way of remembering information. An important assumption that these researchers make is that images tap into more senses than written information alone. However, results from a later study by Childers, Houston, and Heckler (1985) where they further examined this question, resulted in divergent results. They also failed to generate a scale to consistently measure consumers' orientation to engage in visualization or verbalization of product information which they believed could explain why images were more easily remembered than verbal information.

Summary

Images are the most visible and prominent part of fashion advertisements. Sometimes images are the sole element in an advertisement for a fashion product. Although textiles and apparel manufacturers and retailers rely heavily on images to promote the latest fashion trends to market their products, the research literature in this discipline on the effectiveness of images in promotional communication is scarce. There is even less evidence on how consumers process images of fashion that might be socially unacceptable or controversial. For example, some fashion apparel might be socially risky for certain consumers because it is made with materials that are considered controversial such as the use of exotic leather or fur.

Through their studies, textile and apparel researchers understand the need to inform consumers about the characteristics of products. Some have found that promotional materials, such as advertisements, need to include more information about the materials that make up

fashion products. Thomas et al. (1991) found that it is important for advertisers to include more fiber content of garments in advertisements. These researchers also found that consumers pay attention to the information in the media and advertisements. Because fashion conscious consumers rely on the media when looking for the latest fashion trend changes with every new season, apparel and textile researchers need to better understand the role that images play in communicating such messages.

Apparel research suggests that women are more interested in fashion than men. Sexual orientation among men has also been explored in order to understand if there are significant differences among males or if the perception that homosexual men are more highly involved than other men or as highly involved as females is real. However, there is limited research in this area on how consumers process fashion promotional information. Understanding how advertisement information is processed, especially among those consumers who are more enthusiastic about fashion products, might help fashion retailers and manufacturers of products that may be considered controversial communicate with their targeted consumers while minimizing the risk perception that their products are socially unacceptable.

Among other disciplines in the social sciences, a number of theories have been developed that provide different views on how the issue of images in advertisements may be explained and understood. Social psychology has been influential in framing the understanding of persuasive communication. This discipline has framed the problem in terms of attitude change. The focus has been on the number of arguments needed to persuade others. Researchers have generated the idea that more interested or involved people will require more arguments (Petty & Caccioppo, 1984). Thinking in terms of persuasion, they have also explored how the images might help or hinder the persuasiveness of an issue. The Foote, Cone, and Belding (FCB) and the Elaboration

Likelihood Model (ELM) were the two most important models that were reviewed in detail. While social psychology has generated many useful ideas and concepts that have shape research on the issue, the evidence that has resulted is mixed. A review of the literature revealed there have been several researchers who have highlighted the flaws in the evidence used to support the models (Crimmins, 1997; Scott & Batra, 2003). Models have been based on not only marginal results, but also researchers have used methodologies that may lack external validity. The discussions of results are misleading because although their evidence to support their findings is marginal, the tone used to describe their findings is positive. In addition, some researchers have been unable to replicate the ELM's findings (Cole et al., 1990; Costley, 1988).

Advertising and consumer researchers have used the literature in social psychology to sketch the processes that might work in consumer communication. These researchers also used the understanding in learning to shape the views on human persuasion. The theoretical framework of involvement provides many useful ideas to explore how images may influence consumer behavior. The state of involvement has been recognized as an important factor in influencing information processing because it is the motivation to read, but also to talk to others about relevant products such as fashion. However, a major drawback is that most studies have used convenience samples made up of university students recruited from business classes. Although student samples are a common approach to studying phenomena, student samples often lack external validity. From this body of work, researchers have also developed instruments to try to measure involvement. There is evidence to suggest that these instruments are useful in understanding a state of involvement.

Numerous studies have been done to develop and revise these involvement scales. Many apply these scales to different product categories. However, some of the most important scales

were developed by Zaichkowsky and Laurent and Kapferer in 1985. As shown in Table 1, McQuarrie and Munson (1987) combined these two scales into one to generate a multidimensional scale that could be used to measure involvement. The apparel and textiles discipline can use these scales to understand how fashion consumers process the fashion images used in advertisements. The scales can be used along with the Fashion Involvement Index (FII) developed by Tigert et al. (1976) to gauge fashion involvement and how different advertisement elements moderate involvement with advertisements. The evidence would help fill the gaps in the understanding of the role images and text play in advertisements among those who are involved with a product category.

Images are considered an important part of advertisements by making them more memorable. However, as cues, their role in advertisements has been viewed as secondary to that of text. The role of images in fashion advertisements is to convey information about the apparel product, thus their role as pneumonic devices needs to be reconsidered. Understanding the role of images can also lead to a better understanding of the research evidence that seems to suggest that consumers rely on both text and images in advertisements from which they make their own inferences about the products advertised.

Table 1. **Involvement scales**

Researcher(s)	Date Published	Scale Name (Abbreviation)	Total Items	Description	
Zaichkowsky	1985 (Revised 1990)	Personal Involvement Inventory (PII)	20	Semantic differential items scored on 7-point scales.	All items are summed to form an overall measure of involvement.
Laurent and Kapferer	1985 (Revised 1986)	Consumer Involvement Profile (CIP)	16	Likert-type statements scored on a 5-point basis.	Measures 5 dimensions: (1) importance; (2) risk; (3) probability of mispurchase; (4) symbolic & (5) hedonic value that form an overall profile.
McQuarrie and Munson	1987 (Revised 1991)	Revised Personal Involvement Inventory (RPII)	22	Semantic differential items scored on 7-point scales.	The RPII is derived from the sum of all 22 items. Items 1-16 composed the OPII and these items were derived from Zaichkowsky's scale and the others from Laurent & Kapferer. The scale can be subdivided into 3 dimensions: (1) Importance: Items 1-4 & 7; (2) Pleasure: 9-11 & 17-19; (3) Risk: Items 20-22.
Tigert, Ring, and King	1976	Fashion Involvement Inventory (FII)	5	5 Questions: 4 are measured on a 3-point scale and 1 on a 5-point.	Each question is one of 5 facets: (1) fashion innovativeness and time of purchase; (2) fashion interpersonal communications; (3) fashion interest; and (4) knowledgeability; and (5) fashion awareness and reaction to changing fashion trends. The sum forms an overall measure of fashion involvement.

Note. Chart developed with information in "Handbook of marketing scales (2nd ed.)" by W.O. Bearden, and R.G. Netemeyer, 1999.

CHAPTER 3

METHODOLOGY

Data collected in 2001 as part of a larger study funded by a grant were used in this study (Summers & Belleau, 2000). These data had not been analyzed or used in any other research. The methodology and instrument used in this study were based on procedures developed and tested in a pilot study in 2000 involving a local sample of undergraduate students (Santaella, 2001). The data were entered into SPSS 14, and all computations and plots were performed using the same program.

Test Advertisement

Three versions of a fashion advertisement developed in the pilot study were adapted for use in this national study. A New York fashion designer provided the original photograph used as the basis for the image in the test advertisement. The authorization to use the original fashion photograph for the image advertisements is included in Appendix A. Group 1, the control group, received the advertisement that included both copy and image. Group 2 received the copy only advertisement. Group 3 received the image only version of the advertisement. The copy in the advertisement treatments was the same and presented information regarding the comeback of the American alligator and the use of the leather in fashion. The image used in the advertisement treatments was similar to advertisements for major designers such as Versace or Calvin Klein. All three advertisement treatments were produced in full color on magazine-quality paper as shown in Appendix B.

Instrument

The survey instrument is included in Appendix C. The instrument had sets of questions that assessed the demographic characteristics of the sample, level of social acceptance and

compliance for controversial apparel products; current ownership of American alligator, exotic, non-exotic, and faux leather apparel products; level of media exposure; fashion involvement; and involvement with the advertisement.

Demographic Characteristics

Seven forced choice items were included to capture the demographic characteristics of the respondents. The information collected helped to produce a profile of respondents based on race, age, marital status, educational attainment, employment status, and affluence.

Social Acceptance and Compliance of a Controversial Apparel Product

Four items developed by Xu, Summers, and Belleau (2004) to measure product social acceptance and compliance were also included since the test advertisement was for a fashion product considered controversial. The items were measured on a 7-point scale.

Current Ownership of American Alligator, Exotic, Non-exotic, and Faux Leather Apparel Products

Information on current ownership of a variety of genuine and faux leather apparel products was collected. Respondents were asked to check the most appropriate choice from a list of 3 possible options: yes, no, and not sure to answer the ownership questions. If the response was *yes*, respondents were asked to write in the space provided how many items they owned and how many of these items were acquired in the last 5 years.

Media Exposure

Six 5-point Likert-type items from strongly disagree to strongly agree were used to determine if respondents noticed clothing featured in the media such as when clothing appears in magazines. Respondents were also asked to give information about their level of viewership of television and movies as well as magazine readership.

Fashion Involvement Index (FII)

The Fashion Involvement Index (FII) scale developed by Tigert et al. (1976) was used to measure involvement with the product. Although the internal consistency measures were not reported such as Crombach's alpha, it is broadly accepted as a valid and reliable measure of fashion involvement (Bearden & Netemeyer, 1999). The FII has five dimensions of fashion involvement. The first four dimensions are measured on a 3-point scale: (1) fashion innovativeness and time of purchase; (2) fashion interpersonal communications; (3) fashion interest; and (4) knowledgeability; and the fifth dimension, fashion awareness and reaction to changing fashion trends, is measured on a 5-point scale.

Revised Personal Involvement Inventory (RPII)

The Revised Personal Involvement Inventory (RPII) scale was used to measure involvement with the three advertisement treatments. McQuarrie and Munson (1987) developed this multidimensional measure of involvement by merging involvement scales by Laurent and Kapferer (1985) and Zaichkowsky (1985). The RPII measures a state of involvement through a battery of 26 semantic differential items scored on a 7-point Likert-type scale. The Original Personal Involvement Inventory (OPII), importance, pleasure, and risk dimensions make up the four internal dimensions of this scale. The RPII and the OPII have a reported Crombach's alpha of .95 (Bearden & Netemeyer, 1999).

Sample

The intended sample was limited to affluent females, 21 years of age and older with household incomes of $75,000 or more, residing in the following eight metropolitan statistical areas of the United States: Atlanta, Chicago, Dallas, Los Angeles, Miami, New Orleans, New York, and San Francisco. These cities are regarded as primary U.S. fashion centers. The sample

was representative of the racial mix of the female population of each locale within the desired age and income range. Industry partners funding the research project were specifically interested in information about affluent female consumers residing in primary fashion markets whom they perceived to be the most likely consumers of fine alligator leather products.

As previously noted, this study was part of a larger project. The use of human subjects approval is shown in Appendix D.

Names and addresses of 1200 female consumers were purchased for the project from Survey Sampling International (SSI), formerly known as Survey Sampling Incorporated and located in Fairfield, CT, that specializes in providing samples for research surveys. The sample was systematically nth-selected from a relevant sampling frame constructed of all qualifying records of the eight locales. This multidimensional procedure used multiple regression analysis of both individual household data and census data at the block group level to derive the income predictor. Census data were based on over 200 variables related to income from the United States Census. SSI used a variety of inputs to estimate household wealth including correlations to income, home value, education level, tangible and intangible assets, investment activity, philanthropic behavior, and other behavioral and life style characteristics. Over 100 million United States households were represented. Targeted affluence samples can be combined with other demographic variables such as age, gender, geographic location, and ethnic group to refine selection targeting.

While there is no widely accepted threshold standard of affluence, and the concept is considered difficult to define, some researchers have operationalized affluence as a multiplier (such as 7x) of the poverty line (Danziger & Gottschalk, 1995) or as a fixed percentage of the highest earners in a society (such as top 5%, 10%, or 20%) (Levy, 1998; Ryscavage, 1999; U.S.

Bureau of the Census, 2000). For purposes of the research project, researchers defined affluent consumers as individuals having a reported household income of at least $75,000. This amount corresponded to approximately 20% of the top earners in the United States population and a 7x multiplier of the poverty line. SSI projected response rates of individuals within the study sample's desired income levels to be 35%.

Test Procedure

The sample was randomly divided into three equal groups of individuals, and each group received one version of the test advertisement along with the survey instrument. The survey instrument had detailed directions and examples of how to enter responses. Respondents were instructed to complete the FII and the social acceptance and compliance items. Then, they were instructed to view the test advertisement and complete the RPII scale and demographic questions.

Research Design

A mail survey was used to collect the data during May 2001. Data collection followed Salant and Dillman's (1994) total survey design guidelines. A personalized letter was first mailed to members of the sample with information describing the study and the selection process. The instrument with a cover letter and metered return envelope was then mailed approximately a week later. About a week later, members of the sample were sent a postcard thanking them if they had already responded and reminding them to complete and return their survey if they had not yet responded. Approximately 3-weeks after the initial survey mailing, a follow-up letter with another copy of the survey and metered return envelope were mailed to all individuals who had not yet responded. Samples of all correspondence are included in Appendix E. A small

alligator leather keychain was offered to the first 100 respondents who returned their completed surveys as a participation inducement.

Statistical Analyses

Frequencies were computed to describe the respondents. As an exploratory technique, frequencies provided a simple method for summarizing the demographic characteristics of respondents including race, age, marital status, educational attainment, employment status, and affluence for each advertisement treatment group: (1) copy and image, (2) copy only, and (3) image only.

A respondent's social acceptance for a controversial fashion product was determined by summing her responses to the four items included for measuring this variable. These four items used a 7-point scale on which a respondent indicated her level of agreement with statements that measure the perception of the social acceptance and compliance with wearing a controversial apparel product. Frequencies were computed and results plotted in histograms to summarize this variable across the three groups.

Ownership of alligator, exotic, non-exotic, and faux leather were summarized using frequencies. These frequencies are presented using histograms for the three treatment groups.

Respondents' media exposure and level of awareness of clothing items featured in advertisements; worn by celebrities; and shown in movies, television, magazines, the Internet, and catalogs were gauged on several items. Results were computed using frequencies and summarized using histograms.

The Fashion Involvement Index (FII) provided an overall fashion involvement score for each respondent. Because the first four items on this scale are measured on a 3 point scale and the last item on the FII is measured on a 5 point scale, the response to this last item was

multiplied by 3/5. Responses on all items were then summed to obtain a respondent's overall fashion involvement score. Box-plots convey a visual overview of the distributions of responses on the FII. Histograms with overlays of the normal curve provide further detail to visualize the distributions of the FII across the three groups. Deviations from normality were assessed using the statistics for skewness divided by the value for its error and the statistic for kurtosis divided by its error. The means and standard deviations were computed for the three groups. These values were also computed for the five facets of the FII. Reliability values were calculated to provide a measure of consistency. An ANOVA was performed in order to assess any potential differences across the three treatment groups as a result of respondents' fashion involvement. Summing the responses of the 26 items included in the original RPII found on Figure C-5 in Appendix C yielded the overall measure of a respondent's level of involvement with an advertisement for a controversial apparel product. Responses on the four internal dimensions of the RPII: (1) Original Personal Involvement Inventory (OPII), (2) importance, (3) pleasure, and (4) risk were also used in this study. A respondent's score on the OPII was derived by summing responses to items 1 through 16. The importance dimension was determined by summing items 1 through 4 and 7. Items 9 through 11 and 17 through 19 were summed to determine the pleasure dimension. Items 20 through 22 were summed to measure the risk dimension (Bearden & Netemeyer, 1999, p. 200). As with the FII, box-plots were used to convey a visual overview of the distributions of respondents' scores on the RPII. Histograms with overlays of the normal curve provided further detail to help visualize the distributions of the RPII across the three treatment groups. Deviations from normality were assessed using the statistics for skewness divided by the value for the skewness error and the statistic for kurtosis divided by the kurtosis error. The means and standard deviations on the RPII were computed for the three groups. These

values were also computed for the RPII's dimensions: (1) Original Personal Involvement Inventory (OPII), (2) importance, (3) pleasure, and (4) risk. Reliability values were computed to provide a measure of consistency. An ANOVA was performed in order to assess differences across the three treatment groups for these variables. Based on the SPSS output, the Levene test showed concerns for non-homogeneous variability on the risk dimension. For this reason, a Krustal-Wallis non-parametric test of this dimension was used to further test for significant differences followed by a Man-Whitney U test in order to analyze where the differences were. Box-plots were used to visualize this information. No other transformation was necessary.

Two items were used to gauge respondents' overall impressions of the advertisement treatments. Respondents rated the advertisement treatment they viewed on how (1) persuasive/not persuasive they perceived the advertisements to be and if they thought they would be (2) more likely/less likely to buy the product advertised. The items were scored on a 7-point scale. Deviations from normality were assessed using the statistics for skewness divided by the value for the skewness error and the statistic for kurtosis divided by the kurtosis error. The analysis revealed some positive skewness on item (2) more likely/less likely to buy only. For this reason these data were transformed using the log(X+2). An ANOVA was used to determine if there were significant differences among all groups based on these two measures.

Hypotheses Testing

Multiple regression (MR) analysis was used to test for moderation (i.e., slope differences across groups). Moderation is a term used within a range of disciplines including social and psychological research to describe a relationship where a third variable Z affects the relationship between the dependent variable Y and another independent variable X. "In other words, the nature of the relationship between X and Y varies, depending on the value of Z" (Jaccard,

Turrisi, & Wan, 1990, p. 7). This relationship has also been known as an interaction (Miles & Shevlin, 2006, p.165). Specifically, the moderator function is a conceptual term used to describe the "....function of third variables, which partitions a focal independent variable into subgroups that establish its domains of maximal effectiveness in regard to a given dependent variable…" (Baron & Kenny, 1986, p. 1173).

The multiple regression method chosen to test for moderation in SPSS 14 followed Aguinis (2004); Aiken and West (1991); Cohen, Cohen, West, and Aiken (2003); and Field (2005). The independent variables were entered in a linear regression by combining common procedures: hierarchical and block methods. Fashion involvement, the advertisement treatment, and the interaction were entered using a hierarchical method. This is a method "…in which independent variables are entered into the regression equation in a sequence specified by the researcher in advance." (Vogt, 1999, p. 129). For this study, the hierarchical method was combined with the block method in order to test the interactions. Three blocks were used. The first block had the results for the FII. The second block had the results for the FII and the dummy variables. The last block had the FII, the dummy variables, and the interaction terms. Within each block the variables were analyzed using "the default method of conducting regression 'enter'. This is the same as forced entry…in that all of the covariates are placed into the regression model in one block and parameter estimates are calculated for each block" (Field, 2005, p. 226).

For Hypotheses 1, the dependent variable Y was continuous given by the level of involvement with an advertisement for a controversial fashion apparel product as measured by the RPII and its internal dimensions: (1) Original Personal Involvement Inventory (OPII), (2) importance, (3) pleasure, and (4) risk. The independent variable X was also continuous and was

given by the level of fashion involvement as measured by the FII. The regression of Y on X was moderated in this hypothesis by the independent categorical variable Z given in this study by the three mutually exclusive and exhaustive g groups of advertisement treatment such that G represented the total number of g groups and G - 1 was the number of dummy codes needed in the MR analyses (Aiken & West, 1991; Cohen et al., 2003; Tabachnick & Fidell, 2001). As a result, there were 3 - 1 = 2 dummy coded variables. The dummy coding used is presented in Table 2. Group 1, respondents who viewed the Copy and Image advertisement treatment, was used as the control/comparison g group in the model.

Scatterplots with the regression lines were also included to help visualize the results for Hypotheses 1 through 5. Although significant interactions are often shown in scatterplots by non-parallel lines on an interaction graph, care should be taken when interpreting these lines as interaction depends "…on the degree to which the lines are not parallel!" (Field, 2005, p. 415).

Table 2. **Dummy variable coding system**

Groups	D_1	D_2
Copy and Image (Reference group)	0	0
Copy only	1	0
Image only	0	1

For statistical purposes in this study, the focus of the analyses was to establish "practical" significance of moderation (Aguinis, 2004, p.140). As a result, statistical significance was established by focusing on the ΔR^2 (Aguinis, 2004, p.140). The effect size of at least .01 or .02 of a statistically significant ΔR^2 was also required in order to be considered important (Aguinis, 2004, p. 141).

In this study FII results were centered, put in deviation score form so that the mean was zero. This neither changed the significance of the test nor the values of the simple correlations. The interpretation of the B regression coefficients change when the X is centered. However, when there is no interaction, the value of the B centered regression coefficients is the same as when not centered (Cohen et al., 2003).

Equation 1 was used to express the interaction in this study. The other equations used in this study are similar to those described in Aiken and West (1991). Centering does not affect the interpretation of the coefficients. The equation for the dummy variables, continuous variable, and interaction is written as Equation 1.

$$\hat{Y} = B_1 D_1 + B_2 D_2 + B_3 FI + B_4 (D_1 \text{ X } FI) + B_5 (D_2 \text{ X } FI) + B_0 \quad (1)$$

$\hat{Y}$ is interpreted as the predicted value of involvement with the advertisement as measured by the RPII and its dimensions on fashion involvement (FI) as measured on the FII when an interaction is present; B_1 and B_2 are the unstandardized regression coefficients for the dummy variables; B_4 and B_5 are the unstandardized regression coefficients for the interaction of the dummy variables; and B_0 represents the involvement with the advertisement mean for the Copy and Image group, the reference group. Because there were G – 1 = 2 levels of the categorical variable, two terms were added to represent the interaction. $(D_1 \text{ X } FI)$ and $(D_2 \text{ X } FI)$ are formed by multiplying the continuous variable fashion involvement (FI) as measured by the FII and the G - 1 levels of the categorical variable advertisement treatment given by the dummy variables D_1 Copy only and D_2 Image only. The simple regression equations for each treatment group were written as Equations 2, 3, and 4.

Copy and Image: where $D_1 = 0$ and $D_2 = 0$

$$\text{then } \hat{Y} = B_3 FI + B_0 \quad (2)$$

Copy only: where $D_1 = 1$ and $D_2 = 0$

$$\text{then } \hat{Y} = B_1(1) + B_3 FI + B_4 FI + B_0 \quad (3)$$

$$= (B_1 + B_0) + (B_3 + B_4) FI$$

Image only: where $D_1 = 0$ and $D_2 = 1$

$$\text{then } \hat{Y} = B_2(1) + B_3 FI + B_5 FI + B_0 \quad (4)$$

$$= (B_2 + B_0) + (B_3 + B_5) FI$$

In Equation 2, B_3 gives the slope for Copy and Image respondents. In Equations 2 and 3, B_1 and B_2 respectively represent the distances conditioned on fashion involvement. B_1 is the distance between the Copy and Image and the Copy only group in Equation 3, and the B_2 is the distance between the Copy and Image and Copy only regression lines. The slope for the Copy only respondents is given by $(B_3 + B_4)$ in Equation 3, and $(B_3 + B_5)$ represents the slope of Image only respondents in Equation 4. Because the FII score was centered, B_0 represents the mean involvement with the advertisement for the Copy and image group in Equation 2, the Copy only group in Equation 3, and Image only group in Equation 4. Without centering, B_0 would represent the estimated involvement with the advertisement of a respondent scoring zero on the FII. A zero value is outside the possible range of scores on the FII, thus centering was a better option for interpretation.

Given a lack of interaction, Equation 5 represents the simple regression equation with a dummy variable.

$$\hat{Y} = B_1 D_1 + B_2 D_2 + B_3 FI + B_0 \quad (5)$$

Each treatment level had a separate regression given by Equations 6, 7, and 8. Because of the lack of interaction, each line has an identical slope B_3.

Copy and Image: $\hat{Y} = B_3 FI + B_0$ (6)

Copy only: $\hat{Y} = B_1 + B_3 FI + B_0$ (7)

Image only: $\hat{Y} = B_2 + B_3 FI + B_0$ (8)

As shown in Table 3, for statistical purposes the demographic characteristics in Hypothesis 2 were collapsed and dummy coded as suggested by Cohen et al. (2003). The rationale for the reference groups chosen for the dummy codes is provided in Table 3. A multiple regression (MR) analysis was used to determine how the demographic characteristics moderated the relationship between fashion involvement and level of involvement with an advertisement for

Table 3. **Demographic characteristics: Collapsed variables and dummy codes used**

Demographic Characteristic	Number of		DUMMY CODES		
	Levels	Collapsed	D_0	D_1	D_2
Race[1]	6	2	White	Non-White	
Age[2]	6	3	21-40	41-60	61-over
Marital Status[3]	4	2	Married	Single	
Education[4]	6	2	College Graduate	Not College Graduate	
Employment Status[5]	5	2	Employed	Not Employed	
Affluence[6]	6	2	$75,000 and over	Less than $75,000	

Note.
[1] Based on population data, white was the majority in the United States (Hobbs & Stoops, 2002).
[2] In 2002, the 21 to 40 years of age segment was a majority in the United States (Hobbs & Stoops, 2002).
[3] Although married-couple households have declined in the United States, they still account for the most common type of households 52% in 2000 (Hobbs & Stoops, 2002).
[4] College graduates continue to enjoy a wage premium over less educated individuals (Taber, 2001).
[5] According to published data from the U.S. Department of Labor and Statistics (2001, May, p.71), the employment population ratio, "civilian employment as a percent of the civilian noninstitutional population," was 64.3%. The level of unemployment for women was 3.6% (U.S. Department of Labor and Statistics, 2001, May, p.72).
[6] Affluent consumers in this study were individuals having a reported household income of at least $75,000. This amount corresponded to approximately 20% of the top earners in the United States population and a 7x multiplier of the poverty line (Danziger & Gottschalk, 1995; Levy, 1998; Ryscavage, 1999; U.S. Bureau of the Census, 2000).

a controversial apparel product. The method used was hierarchical with blocks as previously described. The first block had the results for the FII. The second block had the results for the FII and the dummy variables. The last block had the FII, the dummy variables, and the interaction terms. As before, statistical significance was established by focusing on the ΔR^2.

Before testing Hypotheses 3 and 4, the variable, ownership, was collapsed for statistical purposes from 3 to 2 categories: those who did and did not own alligator, exotic, non-exotic, and faux leather. Those respondents who were not sure were classified as missing. Those respondents who said they owned alligator, exotic, non-exotic, and faux leather were coded zero. For theoretical reasons, 1-tail Pearson correlation analyses were used to test these hypotheses In the 1-tail Pearson, the probability is not split between the two tails. Fashion involvement theory predicts that as people are more fashion involved, they become more involved with the apparel product and they are more fashion forward (Tigert et al., 1976). Fashion involvement theory also suggests that the more fashion involved people are, the more likely they will buy apparel products (O'Cass, 2004). For this reason, a directional test was more appropriate (Field, 2005, p. 29).

To test Hypotheses 5 and 6, 1-tail Pearson correlation analyses were used. Research indicates fashion involved individuals pay more attention to the media to tell them what is in style and guide them in their purchase decisions (Thomas et al., 1991). For this reason, a directional test was more appropriate (Field, 2005, p. 29). Fashion involvement theory predicts that people who are more fashion involved will be more likely to seek fashion advertisements and use them to make purchase decisions (Thomas et al., 1991). Theory also suggests that different people vary in their degree of personal advertisement involvement just as they vary in their degree of product involvement (Zaichkowsky, 1994). Research also suggests that the more

people are involved with an apparel product, the more interested they are in advertisement (Flynn & Goldsmith, 1993).

Hypotheses 7 through 10 were developed from previous research by Santaella (2001) as a general assessment of respondents' evaluation of the advertisement treatment. In order to analyze these hypotheses, 1-tail Pearson correlation analyses were used.

CHAPTER 4

RESULTS AND DISCUSSION

The purpose of this chapter is to present a description of respondents, the results of the test hypotheses, and a discussion of the findings. Information on how well the data met the assumptions required by the statistical tests is also provided.

Profile of the Respondents

From the valid sample of 1,200 women living within major metropolitan areas of the United States that included Atlanta, Chicago, Dallas, Los Angeles, Miami, New Orleans, New York, and San Francisco, 72 surveys were returned by the postal service as undeliverable or by those respondents who asked not to be included in the study, and 260 completed surveys were returned. The resulting response rate was 23%. Among the completed and returned surveys, there were surveys with missing responses on the measures of interest. Because these missing responses were random and not systematic, these returned surveys were eliminated from the analyses. Table 4 shows the final size of each group according to the three different treatments tested: Group 1 (n = 66) saw the copy and image advertisement, Group 2 (n = 86) saw the copy only advertisement, and Group 3 (n = 76) saw the image only advertisement. Appendix B shows the three advertisement treatments.

Table 4. **Advertisement treatment groups**

Group	Treatment	N
1	Copy and Image	66
2	Copy only	86
3	Image only	76

As shown in Table 5, the majority of the respondents in all three groups were white, not of Hispanic origin. There was representation from minorities, but no one single minority group made up more than 14% of the total. Within minority respondents, African-Americans were the majority in Group 1. Hispanics surpassed African-Americans in the other two groups. Group 1 did not have any missing data, and the percentage of missing data in the other groups was small, less than 4%.

Table 5. **Racial background of respondents**

Group		American Indian	Asian or Pacific Islander	African American	Hispanic	White not of Hispanic Origin	Other	Missing	Total
1	N	0	4	9	2	50	1	0	66
	%	0	6.1	13.6	3.0	75.8	1.5	0	100.0
2	N	0	5	5	7	62	4	3	86
	%	0	5.8	5.8	8.1	72.1	4.7	3.5	100.0
3	N	0	6	5	7	55	1	2	76
	%	0	7.9	6.6	9.2	72.4	2.0	2.6	100.0

Respondents, in general, were older than 30 years of age as shown in Table 6. More respondents across the three groups were between 41 to 50 years of age followed by respondents whose ages ranged between 31 to 40 years. Few respondents were 71 and over or between 21 to 30 years of age. Missing values were low, below 3%.

Table 6. **Age of respondents**

Group		21-30	31-40	41-50	51-60	61-70	71 and over	Missing	Total
1	N	8	12	24	8	10	3	1	66
	%	12.1	18.2	36.4	12.1	15.2	4.5	1.5	100.0
2	N	3	23	34	13	9	2	2	86
	%	3.5	26.7	39.5	15.1	10.5	2.3	2.3	100.0
3	N	8	16	28	6	11	5	2	76
	%	10.5	21.1	36.8	7.9	14.5	6.6	2.6	100.0

As shown in Table 7, most respondents across the three groups were married. The percentage of divorced women was similar across groups, between 8% and 12%. Widows accounted for less than 2% across the three groups. Group 1 had more respondents who were single, never married, around 15%. Missing values were below 3% across the three groups.

Table 7. **Marital status of respondents**

Group		Single, never married	Married	Divorced	Widowed	Missing	Total
1	N	10	44	8	3	1	66
	%	15.2	66.7	12.1	4.5	1.5	100.0
2	N	5	71	7	1	2	86
	%	5.8	82.6	8.1	1.2	2.3	100.0
3	N	7	57	8	2	2	76
	%	9.2	75.0	10.5	2.6	2.6	100.0

Level of educational attainment of respondents was high across all groups as shown in Table 8. Most respondents had attended or graduated from college. Groups 2 and 3 had the highest percentage of these respondents. Many respondents also had an advanced degree. Group 1 had the highest percentage of respondents who said they had an advanced degree and the highest percentage of respondents who had gone to technical school. This was also the only group with respondents who said that they did not finish high school though the percentage was quite low at 3%. Missing data were low ranging from 5% to 7%.

Table 8. **Education**

Group		Less than high school diploma	High school graduate	Trade or technical school	Some college	College degree	Advanced Degree	Missing	Total
1	N	2	9	4	13	24	14	0	66
	%	3.0	13.6	6.1	19.7	36.4	21.2	0	100.0
2	N	0	8	2	27	32	13	4	86
	%	0	9.3	2.3	31.4	37.2	15.1	4.7	100.0
3	N	0	10	0	23	23	15	5	76
	%	0	13.2	0	30.3	30.3	19.7	6.6	100.0

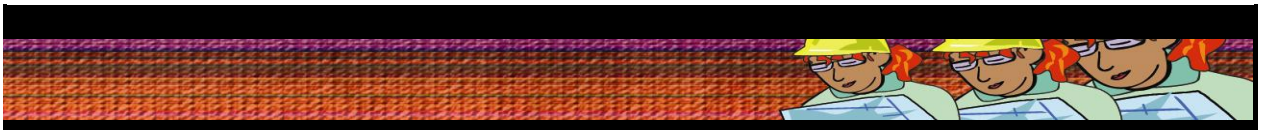
Across all groups, a large majority of respondents were employed, and the percentage of women employed in each group was almost equal as shown in Table 9. Groups 1 and 3 had a similar number of women who reported being retired or who said they were homemakers. Group 2 had the highest number of respondents who said they were homemakers. Few respondents reported they were unemployed or checked other. Missing data were low ranging from 1.5% to 5%.

Table 9. **Employment status of respondents**

Group		Employed	Homemaker	Retired	Unemployed	Other	Missing	Total
1	N	40	9	11	3	2	1	66
	%	60.6	13.6	16.7	4.5	3.0	1.5	100.0
2	N	52	21	6	0	3	4	86
	%	60.5	24.4	7.0	0	3.5	4.7	100.0
3	N	48	9	13	2	2	2	76
	%	63.2	11.8	17.1	2.6	2.6	2.6	100.0

Table 10 shows that among those women who were employed, most stated they were in professional positions. The percentage of women who said they worked in managerial positions or who were self-employed was about equal across the three groups. Because this was a follow-up question that applied only to those who were employed, there were many cases with missing information.

Table 10. **Occupation, if employed**



Group		Professional	Technical	Management	Self-employed	Other	Missing	Total
1	N	28	1	8	12	0	17	66
	%	42.4	1.5	12.1	18.2	0	25.8	100.0
2	N	30	5	9	20	0	22	86
	%	34.9	5.8	10.5	23.3	0	25.6	100.0
3	N	32	5	11	10	0	18	76
	%	42.1	6.6	14.5	13.1	0	23.7	100.0

Across all three groups, most of the respondents reported living in households with annual incomes of $75,000 or higher as shown in Table 11. Between 15% and 21% resided in households where the annual income was below $50,000 across the three groups. On average across the groups, respondents reported living in affluent households. All three groups had missing data that ranged from 6% to 15% of respondents.

Table 11. **Household Income**

Group		Less than $50,000	$50,000 - $74,999	$75,000- $99,999	$100,000 - $124,999	$125,000 - $149,999	$150,000 and over	Missing	Total
1	N	14	17	12	9	1	9	4	66
	%	21.2	25.8	18.2	13.6	1.5	13.6	6.1	100.00
2	N	13	18	16	9	4	13	13	86
	%	15.1	20.9	18.6	10.5	4.7	15.1	15.1	100.00
3	N	12	21	8	8	6	12	9	76
	%	15.8	27.6	10.5	10.5	7.9	15.8	11.8	100.00

Social Acceptance of a Controversial Apparel Product

Four 7-point Likert-type scale items from extremely disagree to extremely agree were used to measure social acceptance and overall perception of controversial high-fashion apparel products such as those made with American alligator leather. American alligator is not an endangered species, and it is not illegal to own such apparel products made with this exotic

leather. However, it is more expensive than many other types of leather and some activist groups have found it to be socially unacceptable. Therefore, some respondents may have been afraid to purchase or own such products and their level of involvement may have been higher as the perception of risk increased.

Across the three groups, more respondents had mixed feelings about how socially acceptable it is to wear alligator leather apparel as shown in Figure 2. Slightly more respondents across the three groups agreed at some level that wearing alligator leather apparel is socially acceptable than those who disagreed as to the social acceptability.

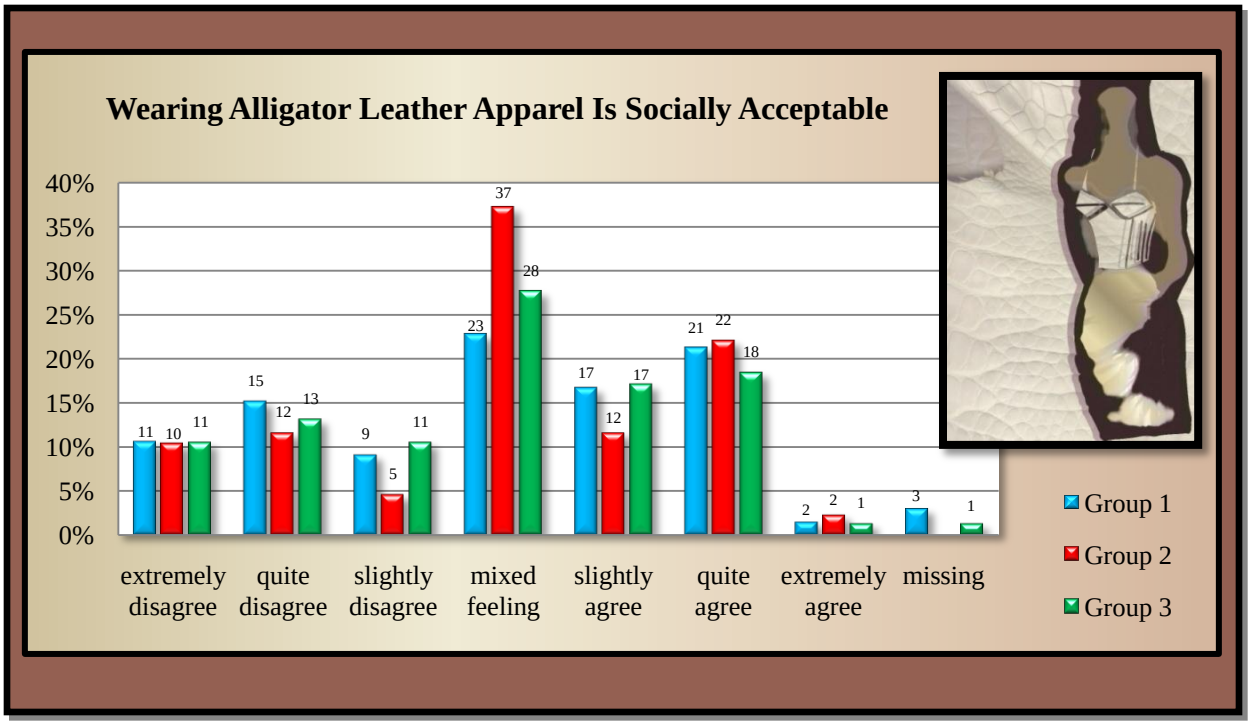


Figure 2. **Social acceptance: Perceptions of the social acceptance of wearing apparel made with American alligator**

Results indicated that respondents did not have a clear understanding of the endangerment status of the American alligator as shown in Figure 3. While many respondents had mixed feelings in all three groups, almost 40% expressed some level of agreement with the statement that the American alligator is no longer an endangered animal.

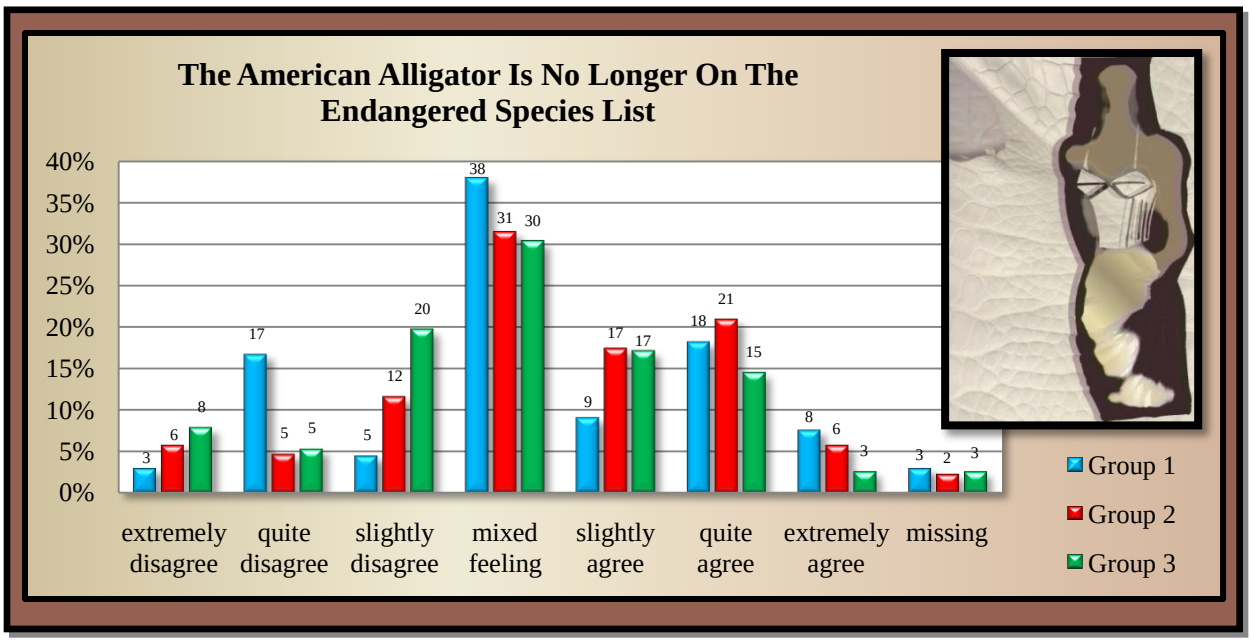


Figure 3. **Social acceptance: Awareness of the endangerment status of the American alligator**

When considering the selection of clothing, social acceptance was less important to respondents as shown in Figure 4. A number of respondents also had mixed feelings that social acceptance is important for me when selecting apparel.

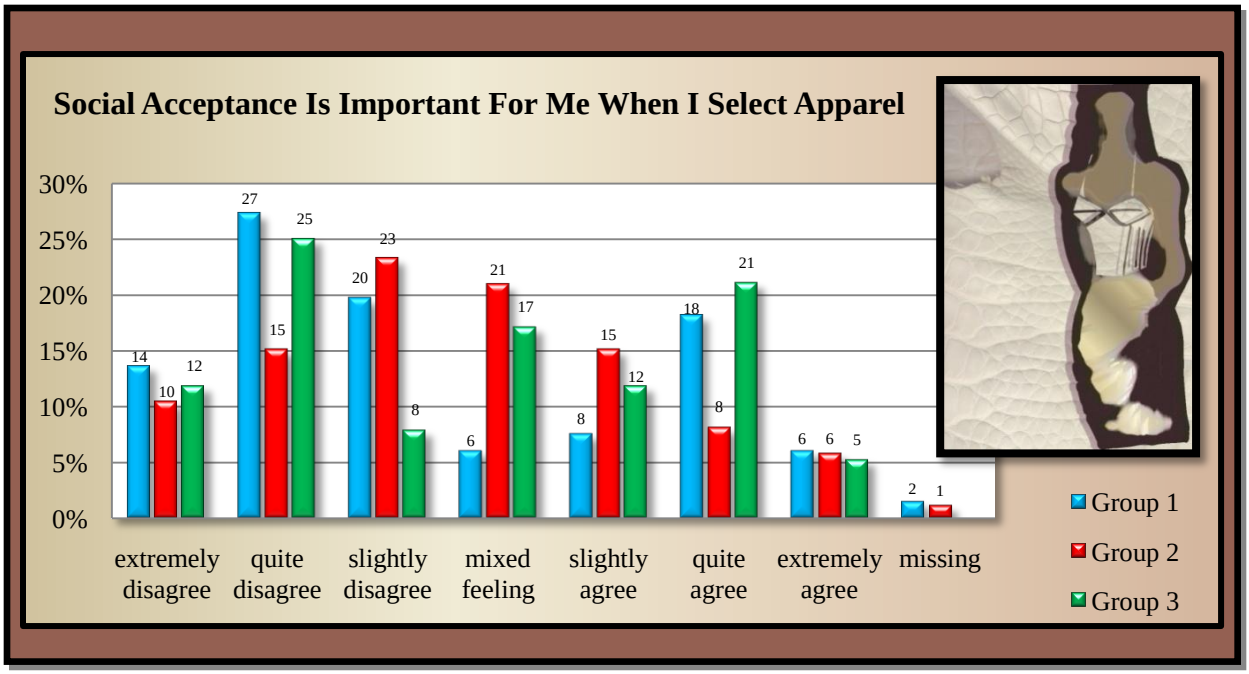


Figure 4. **Social acceptance: Importance when selecting apparel**

As shown in Figure 5, most respondents extremely agreed that I would not buy apparel made with skins of endangered animals. Across the groups a small number had mixed feelings or disagreed.

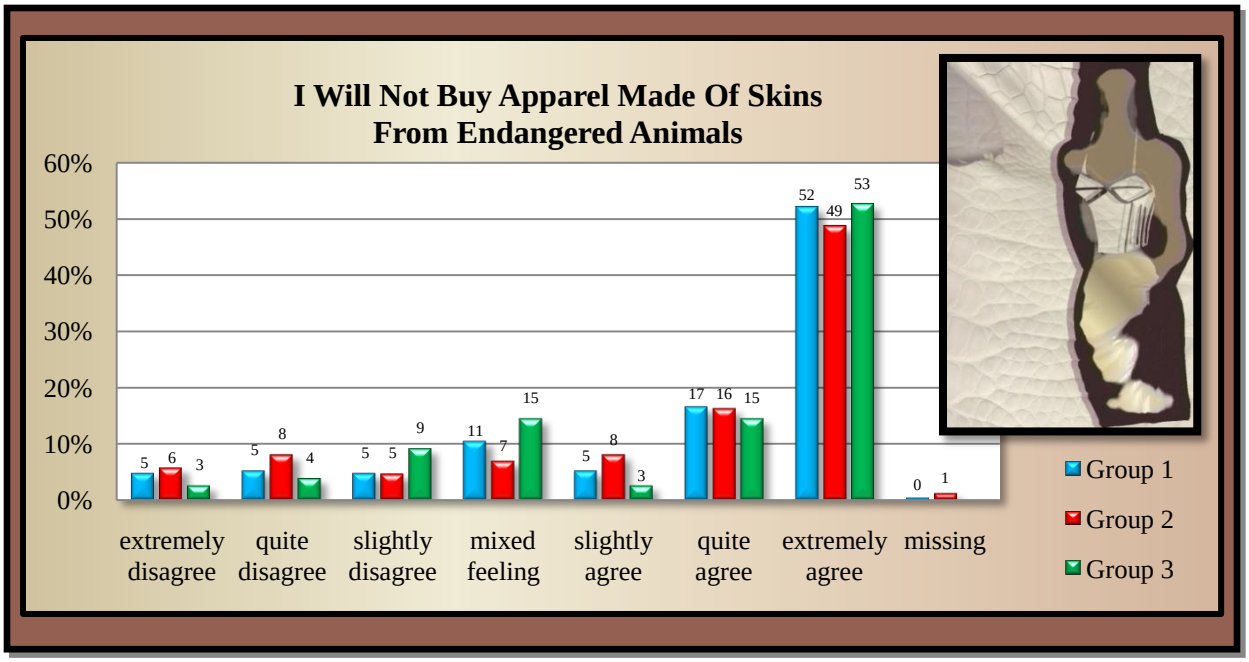


Figure 5. **Social acceptance: Purchase intention of apparel made from endangered animals**

Current Ownership of American Alligator, Exotic, Non-exotic, and Faux Leather Apparel Products

Information on current ownership of a variety of real and imitation leather apparel products was collected. Respondents were asked to check the most appropriate choice from a list of 3 possible options: yes, no, and not sure to answer the ownership questions. If the response was yes, respondents were asked to write in the space provided how many items they owned and how many of these items were acquired in the last 5 years.

For all questions, missing information was low. As shown in Figure 6, the vast majority of respondents stated that they did not own alligator leather apparel. However, 11% indicated they did own such type of alligator leather apparel. Only a small percentage of respondents

checked not sure. The mean number of items owned was 2, and these were acquired within the last 5 years.

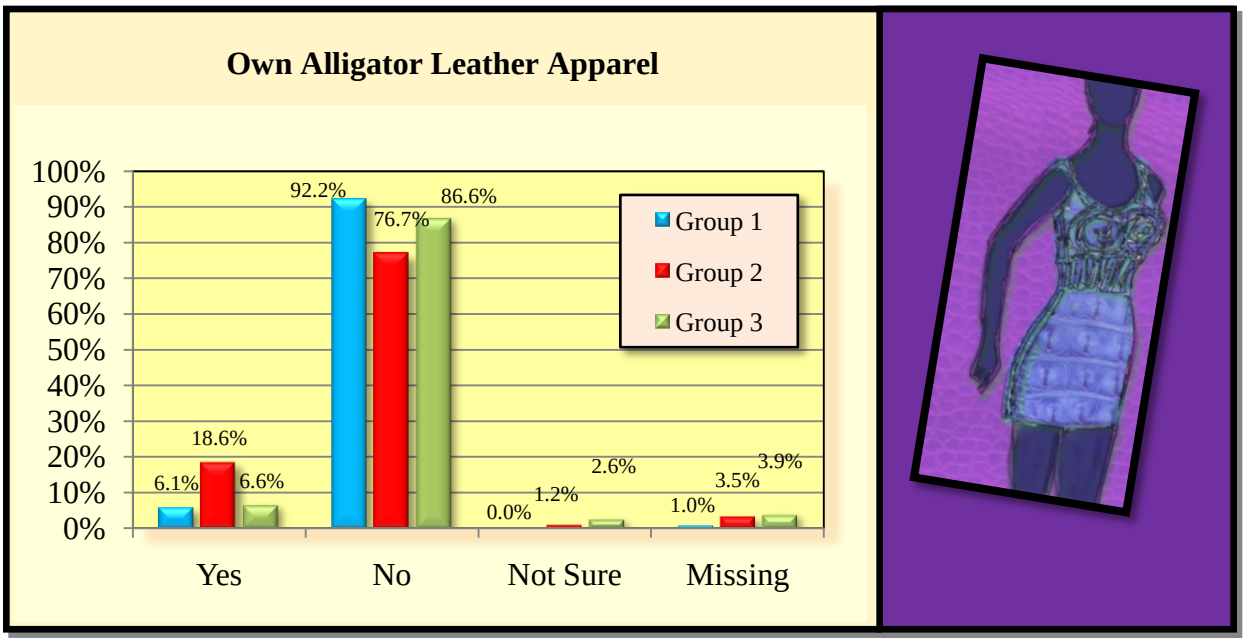


Figure 6. **Ownership of American alligator leather apparel**

Figure 7 shows ownership of exotic leather apparel. A strong majority of respondents did not own apparel made with exotic leather. About 15% did own some type of exotic leather

Figure 7. **Ownership of exotic leather apparel**

apparel. A small percentage was not sure if they owned apparel made with exotic material. The mean number of items owned was 2, and these had been acquired within the last 5 years.

Results in Figure 8 show that most respondents said that they owned non-exotic leather apparel. The percentage of all those who do not own non-exotic leather apparel was almost 29%. A small percent of respondents was not sure if they owned such products, and this percentage was higher than the percentage in the previous two questions. However, the percentage was still low, less than 5% overall. The mean number of items owned was 6.5, and most of these items had been acquired during the last 5 years. However, some of these items had been owned for at least 10 or even 20 years.

Figure 8. **Ownership of non-exotic leather apparel**

More than half of respondents did not own faux leather as shown in Figure 9. The percentage of respondents who were not sure was also higher than on previous items in this set

of questions. The mean number of items owned was close to 1.7, and these items had been acquired within the last 5 years and most within the last year.

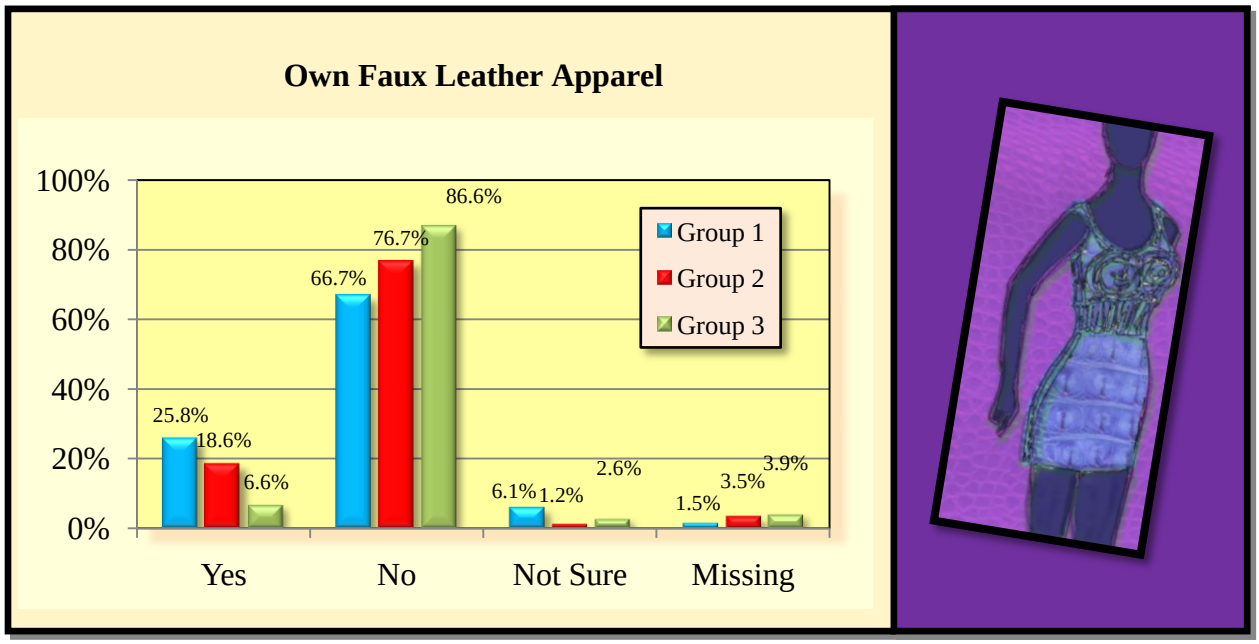


Figure 9. **Ownership of faux leather apparel**

Media Exposure

Several questions were used to gauge a respondent's level of media exposure. Seven 5-point Likert-type items from strongly disagree to strongly agree were used to determine if respondents paid attention to clothing that is featured in the media such as when clothing appears in magazines. Respondents were asked to give information about their level of viewership of television and movies as well as magazine readership. Because only one response was missing in only one group for all questions, missing information was not included as a category in this set of figures.

The percentage of respondents who agreed at some level across all groups with I often buy clothing that has been advertised statement was about equal to those who disagreed. A similar percentage had mixed feelings, as shown in Figure 10.

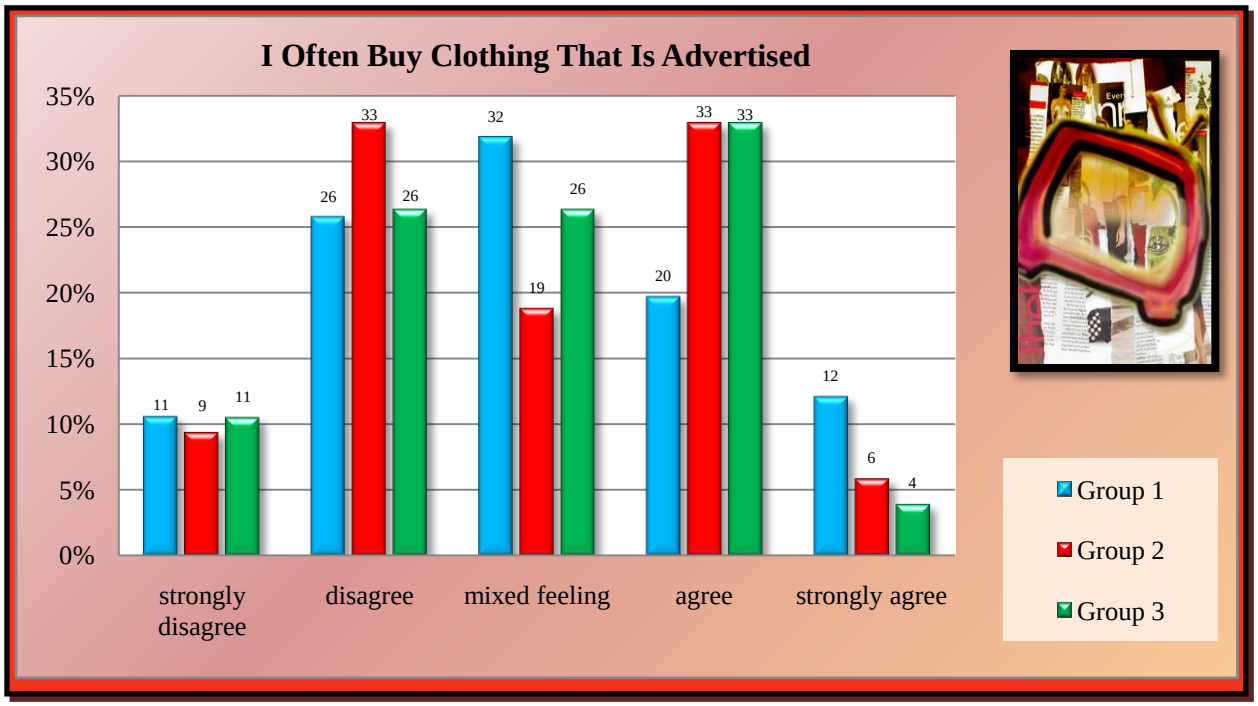


Figure 10. **Media exposure: Purchase behavior of advertised fashion apparel**

As shown in Figure 11, few respondents across all groups agreed with I buy more clothing items if I have seen them worn or used by a celebrity statement. Only about 10%

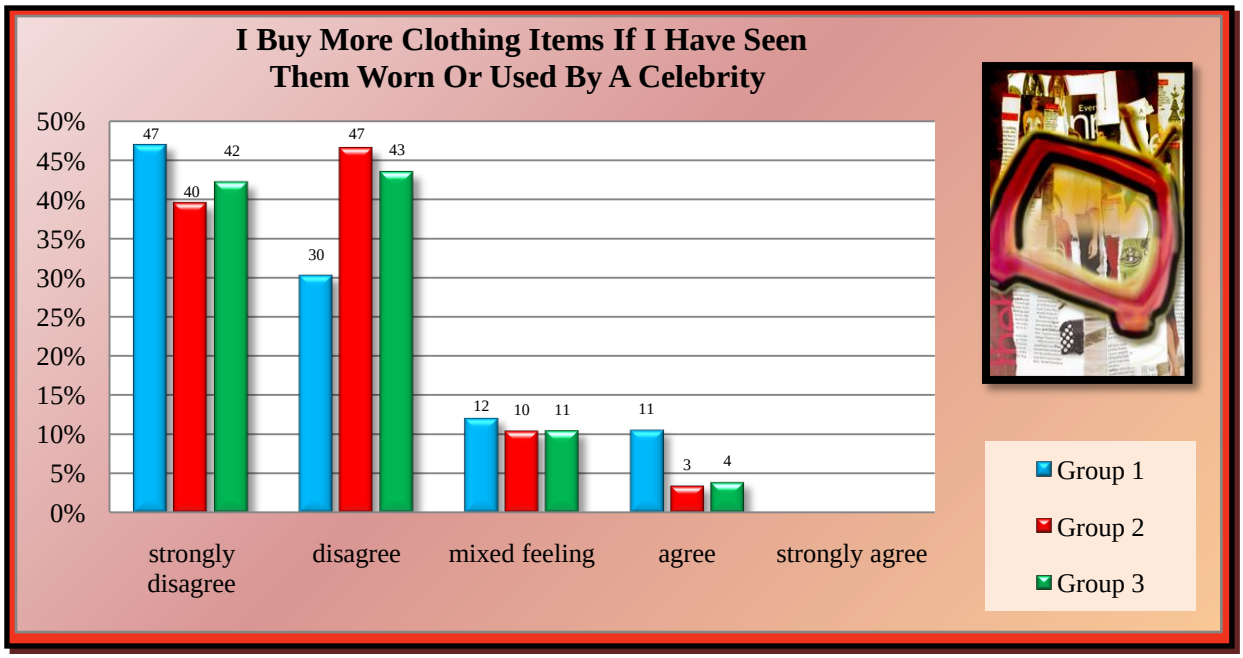


Figure 11. **Media exposure: Purchase behavior of fashion apparel promoted by celebrities**

across the three groups had mixed feelings on this statement. Although there were some respondents who agreed with the statement, especially in Group 1, the percentage in Groups 2 and Group 3 was below 5%. No one strongly agreed with the statement.

The next group of items revealed whether or not respondents noticed clothes that appeared in movies and on television. As shown in Figure 12, respondents noticed clothing in movies with over 50% of respondents across all groups expressing agreement at some level. Between 20% to 27% of respondents had mixed feelings. Although there were some who strongly disagreed, the percentage was relatively small across groups.

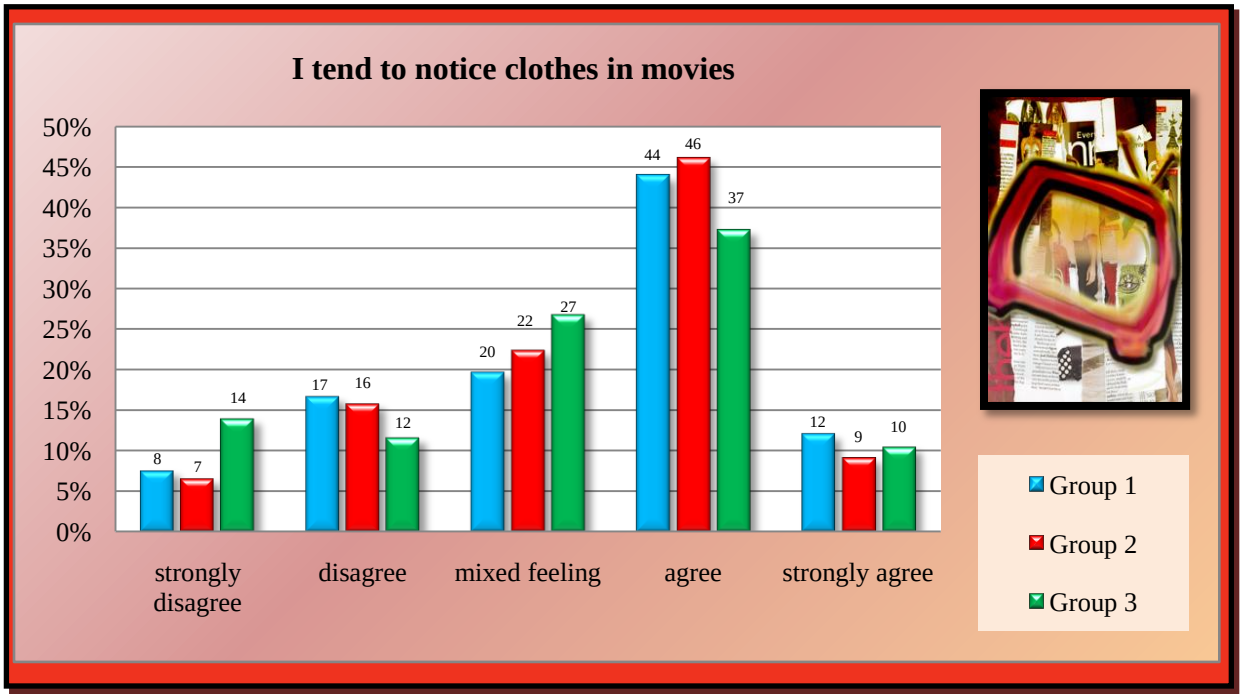


Figure 12. **Media exposure: Awareness of fashion apparel in movies**

Similarly to the responses about clothing being noticed in movies, Figure 13 shows a strong majority of respondents across all groups agreed that they notice clothing in television shows. Almost equal numbers of respondents had mixed feelings or expressed some level of disagreement across all groups.

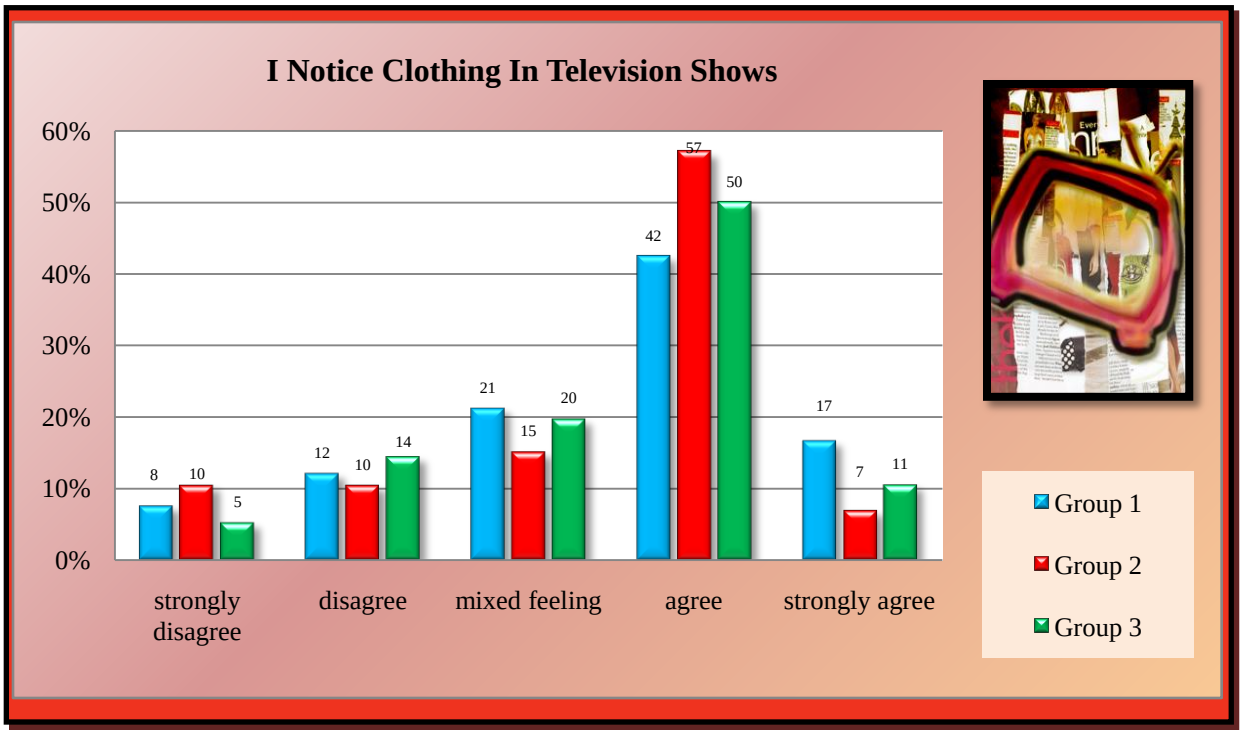


Figure 13. **Media exposure: Awareness of fashion apparel in television shows**

Respondents indicated that they noticed clothing in magazines as reported in Figure 14. Fewer respondents had mixed feelings or disagreed at some level across all groups.

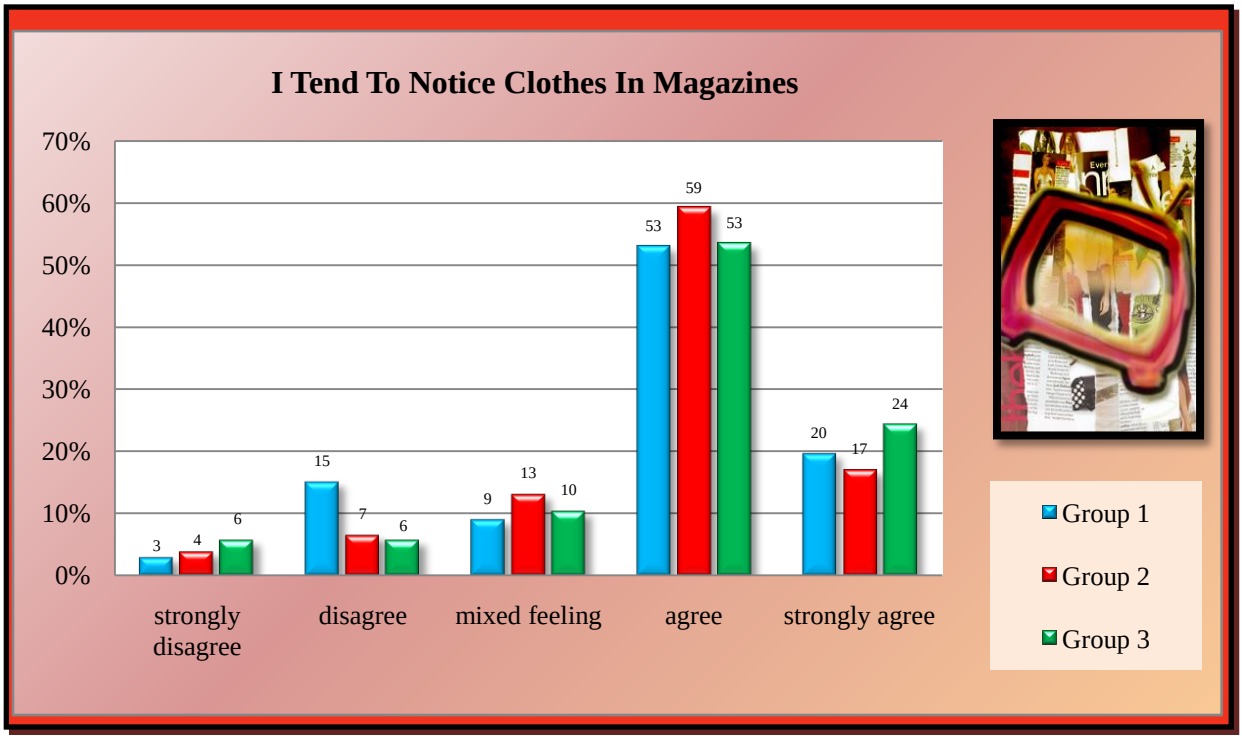


Figure 14. **Media exposure: Awareness of fashion apparel in magazines**

At the time the data were collected, the Internet was less well established as a source for news and information for products and services. Therefore, results related to Internet use may be less relevant now. However, these findings provide a base understanding of respondents' level of awareness of fashion information on the Internet in 2001. Figure 15 shows how likely

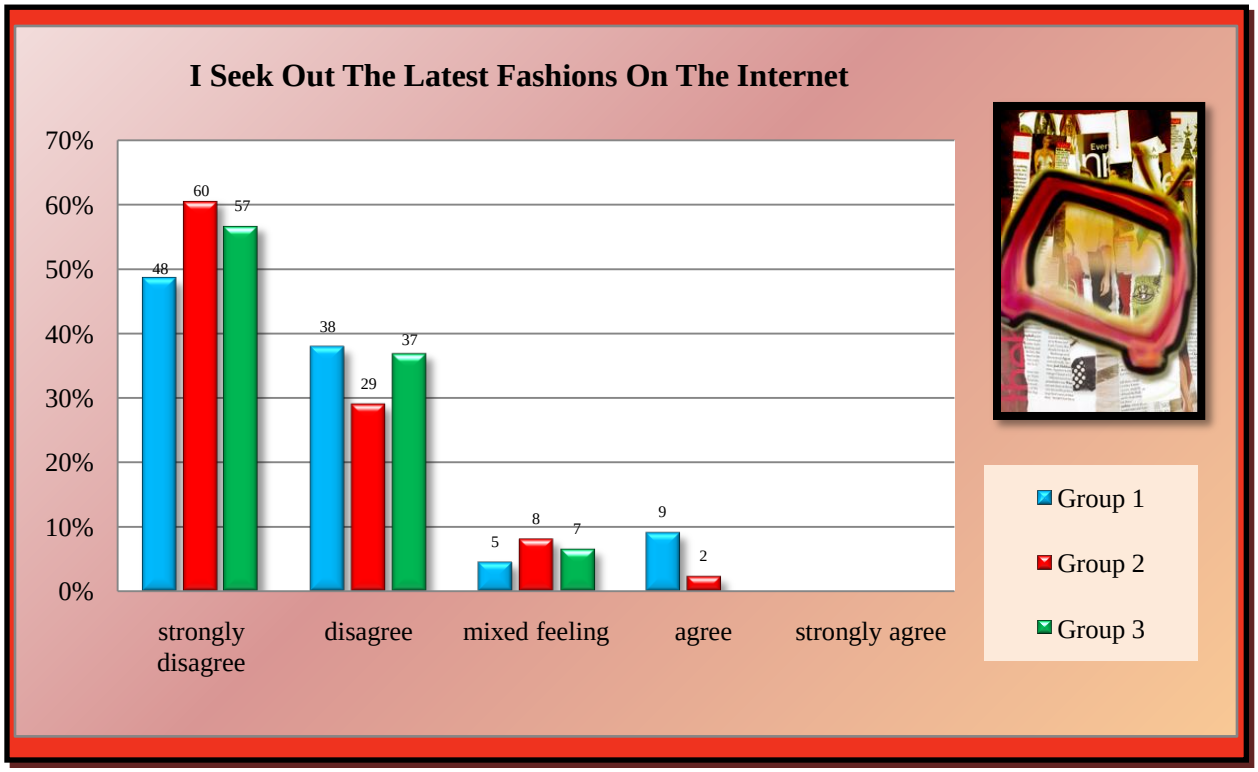


Figure 15. **Media exposure: Awareness of fashion apparel on the Internet**

respondents were to seek information about the latest fashions on the Internet. Unlike other media, the Internet was little used. Almost all respondents across all groups indicated that they did not seek out the latest fashions on the Internet.

Many apparel manufacturers and retailers continue to rely on catalogs to promote their latest fashion products. However, as shown in Figure 16, across all groups only 30% of respondents agreed that they used catalogs. Although 18% to 25% of respondents had mixed feelings, almost 50% disagreed to some extent.

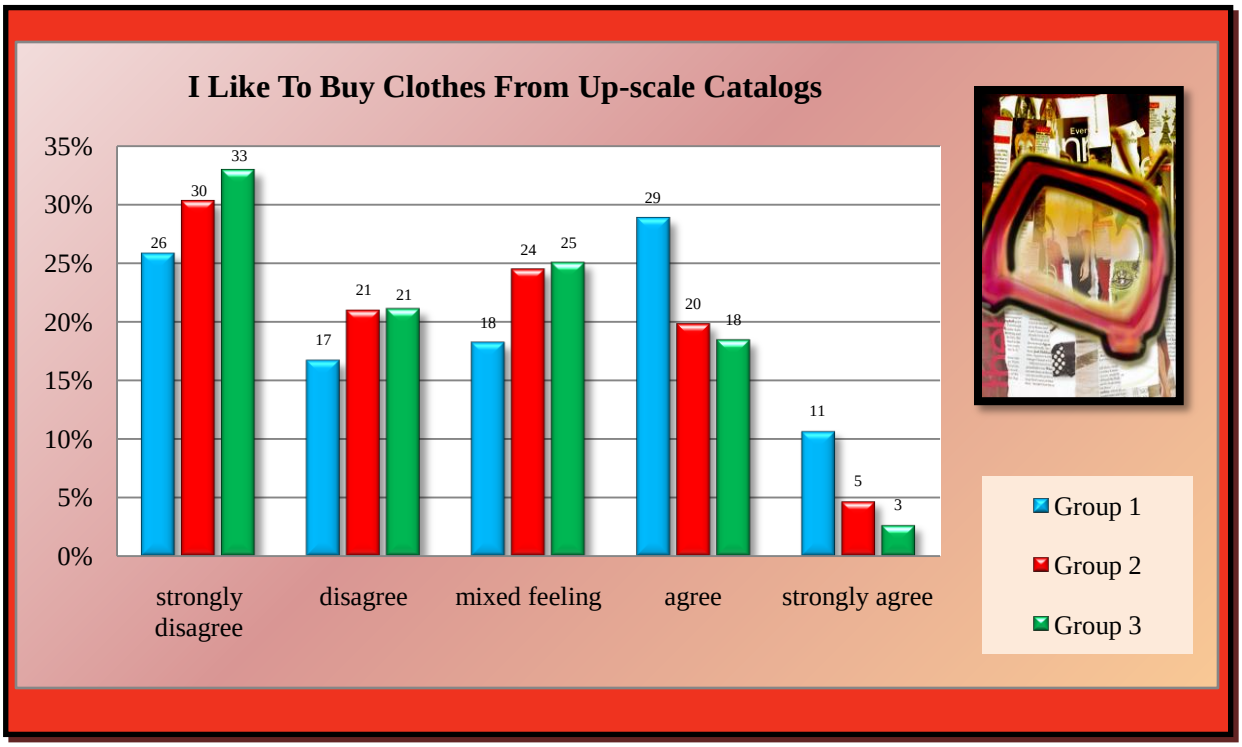


Figure 16. **Media exposure: Purchase preference for fashion apparel featured in up-scale catalogs**

Because media are an important source of fashion and lifestyle information to consumers, learning how many hours respondents believed they spent using the various media outlets was valuable. Although the average response for the number of movies watched per month was 5, the distribution was not normal as it was positively skewed. The median was 4. The few outliers indicated some respondents watched many movies.

Fashion and lifestyle magazines play an important role in the promotion of fashion. For this reason, it was important to understand if respondents read magazines in these categories on a regular basis. Figure 17 shows the readership frequency for major fashion and lifestyle magazines among all respondents. This was a multiple response item. More respondents across all groups reported reading People, Newsweek, Time, and other publications than fashion publications.

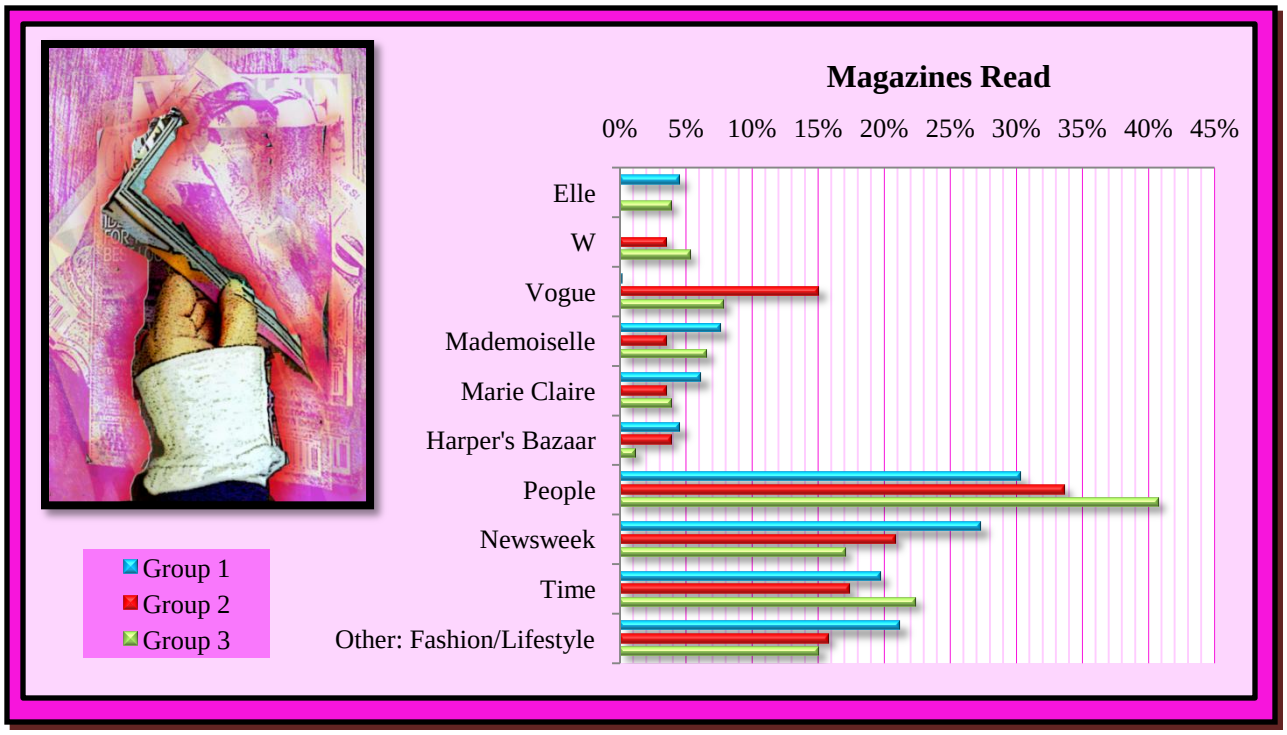


Figure 17. **Media exposure: Readership of fashion and lifestyle magazines**

Fashion Involvement

The Fashion Involvement Index (FII) was used to measure fashion involvement with a fashion apparel product. The box-plots in Figure 18 convey a quick visual overview of the responses on the FII. Graphical analysis using the box-plots showed that these three groups had similar distributions across the three treatments for the measure of fashion involvement.

In Figure 18, the colored boxes represent that portion of the distribution for each group of the sample that falls between "…the 25th and the 75th percentiles, i.e. the **lower** and **upper** quartiles…" (Kinnear & Gray, 1999, p. 97). The thick gold line that runs across the interior of each box represents the median. Visual analysis indicates that the value for the median was similar across the three groups. The boxes appear to be highly symmetrical, thus there was some degree of confidence that the distributions for the groups were normal. Connecting the smallest and largest that are not extreme values are vertical lines called whiskers. While the three groups

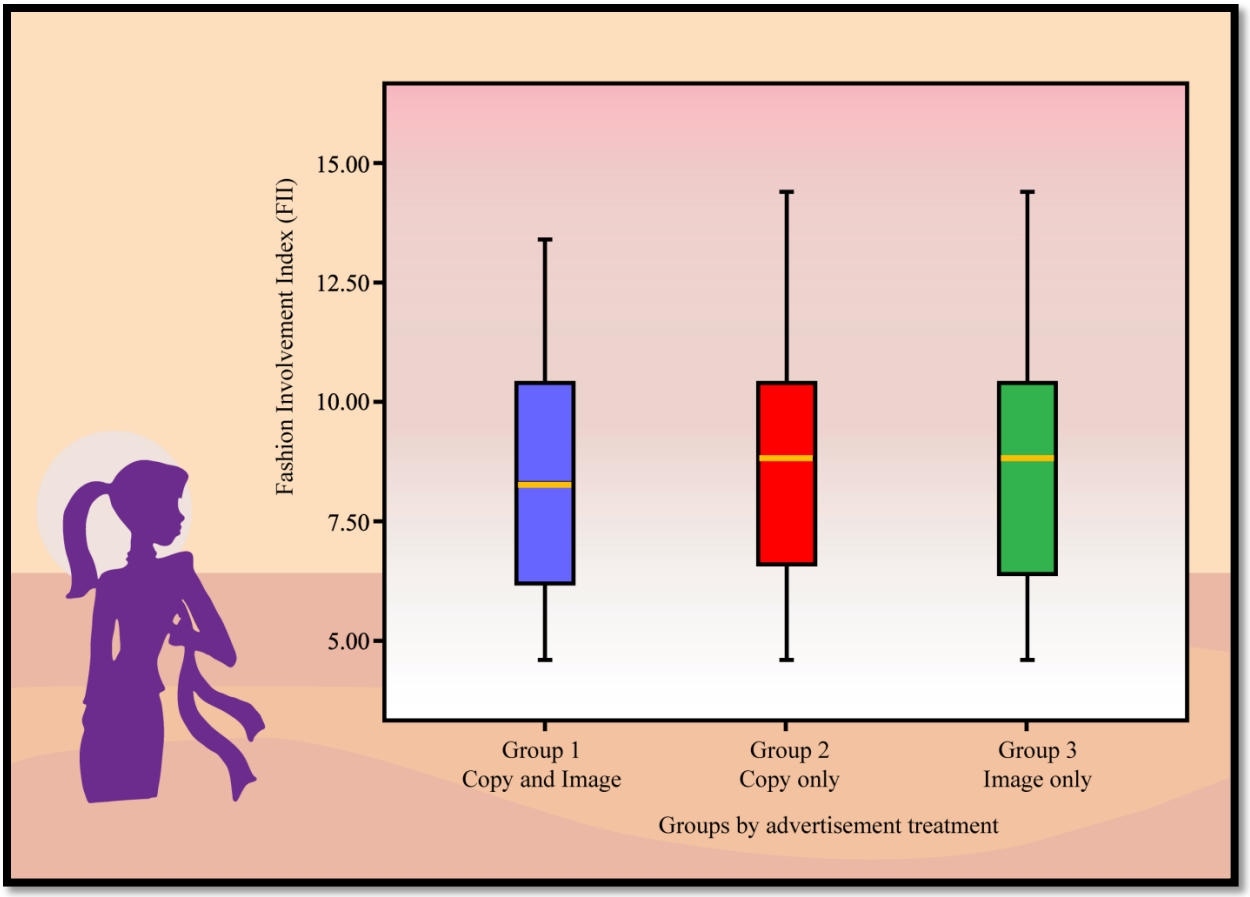


Figure 18. **Distribution of FII for the three treatment groups using box-plots**

have similar smallest values, Groups 2 and 3 had more respondents who were more fashion involved than those in Group 1. At a glance, the differences do not appear to be significant. Outliers are those values that are "…more than 1.5 box-lengths away from the box" (Kinnear & Gray, 1999, pg. 98). These box-plots were especially useful to visually identify any possible outliers. There were no outliers on this measure.

Screening the graphical plots for normality is not necessary in order to do inferences, but these plots are useful in visually screening for non-normal kurtosis or skewness that might undermine our observations. Figure 19 showed no major cause for concern for deviation from the normal distribution based on visual inspection of the histograms for each group on their distributions with the overlays of the normal according to the FII.

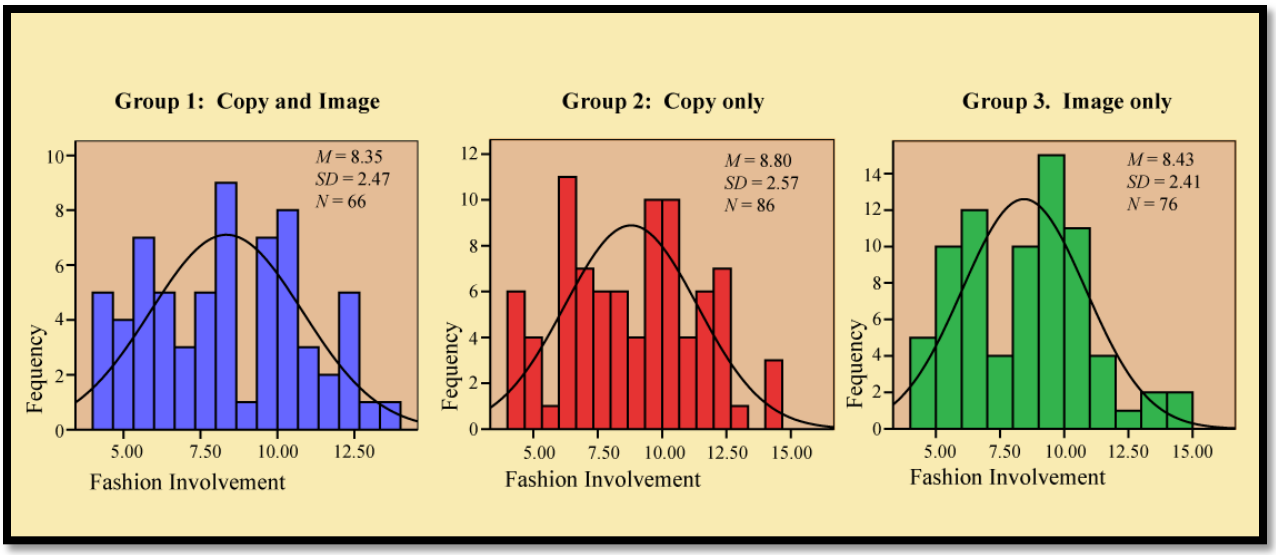


Figure 19. **Fashion Involvement Index (FII) frequency distributions**

Based on the values of the SPSS output, the statistic for skewness was divided by the value for its error and the statistic for kurtosis was divided by its error to test for deviations from the normality. Results no higher than 5.5 gave enough confidence to believe that the distributions were normal, thus no further transformation was needed. The reliability of the findings for the FII was $\alpha = .81$.

The mean and standard deviation for each group are also noted in Figure 19 on the charts. An ANOVA did not reveal significant differences among groups on the basis of the Fashion Involvement Index (FII) alone as $F(2, 225) = .724$, $p > .05$. The groups were similar in their level of fashion involvement, and most respondents were moderately fashion involved. In addition, the standard deviations of the groups were not only similar, but were not too small or large relative to the size of the mean which would lead to distributions that would be flat or peaked. The scores for the range were also similar, between 8.80 and 9.80, with a minimum score of 4.60 and a maximum of 13.40. Using the result from the Fashion Involvement Index (FII) alone, it could be said that respondents were moderately fashion involved.

Table 12 shows the results for the means and standard deviations of the five facets of the Fashion Involvement Index (FII) for each group. Reliability values shown as α in the table did not show cause for concern. The group means were similar, and the ANOVA showed there were no significant differences among the groups. Unlike the results from the overall FII, the means for each facet were not high or even moderate. For this reason, results seemed to suggest that the respondents did not show fashion innovativeness, did not share their ideas on fashion with others, did not show an interest on learning about new trends and fashions, did not have a lot of knowledge of what is fashionable, and did not have an opinion on the latest trends.

Table 12. R**esponses on the five facets of the Fashion Involvement Index (FII)**

Facet	Group 1		Group 2		Group 3		ANOVA	
	α = .794		*α* = .812		*α* = .711		***p* < .05**	
	M	***SD***	***M***	***SD***	***M***	***SD***	***F***	***Sig***
1. Fashion innovativeness and time of purchase	1.61	.63	1.69	.72	1.61	.63	.388	.679
2. Fashion interpersonal communications	1.48	.59	1.65	.65	1.46	.62	2.26	.107
3. Fashion interest	1.74	.69	1.87	.72	1.78	.58	.800	.451
4. Knowledgeability	1.70	.74	1.73	.66	1.74	.64	.073	.930
5. Fashion awareness and reaction to changing fashion trends	1.82	.67	1.86	.65	1.86	.71	.071	.930

Involvement with the Advertisement

The Revised Personal Involvement Inventory (RPII) was used to measure respondents' involvement with an advertisement for a controversial fashion apparel product. The box-plots in Figure 20 give a quick visual overview of the distributions of responses on the RPII. Graphical

analysis using the box-plots showed that respondents had similar levels of involvement across the three variations of advertisement treatment for their involvement with the advertisement.

Similarly to the previous box-plot analysis, the colored boxes represent that portion of the distribution for each group of the sample that falls between "…the 25th and the 75th percentiles…" (Kinnear & Gray, 1999, p. 97). The thick gold line that runs across the interior of each box represents the median. Visual analysis for these three groups showed similarities across the three groups. The median was around 75 on the RPII scale. However, the median for Group 2 was higher, but only by a marginal amount. The distribution was also wider, but overall the boxes are symmetrical. Connecting the smallest and largest values are vertical lines called

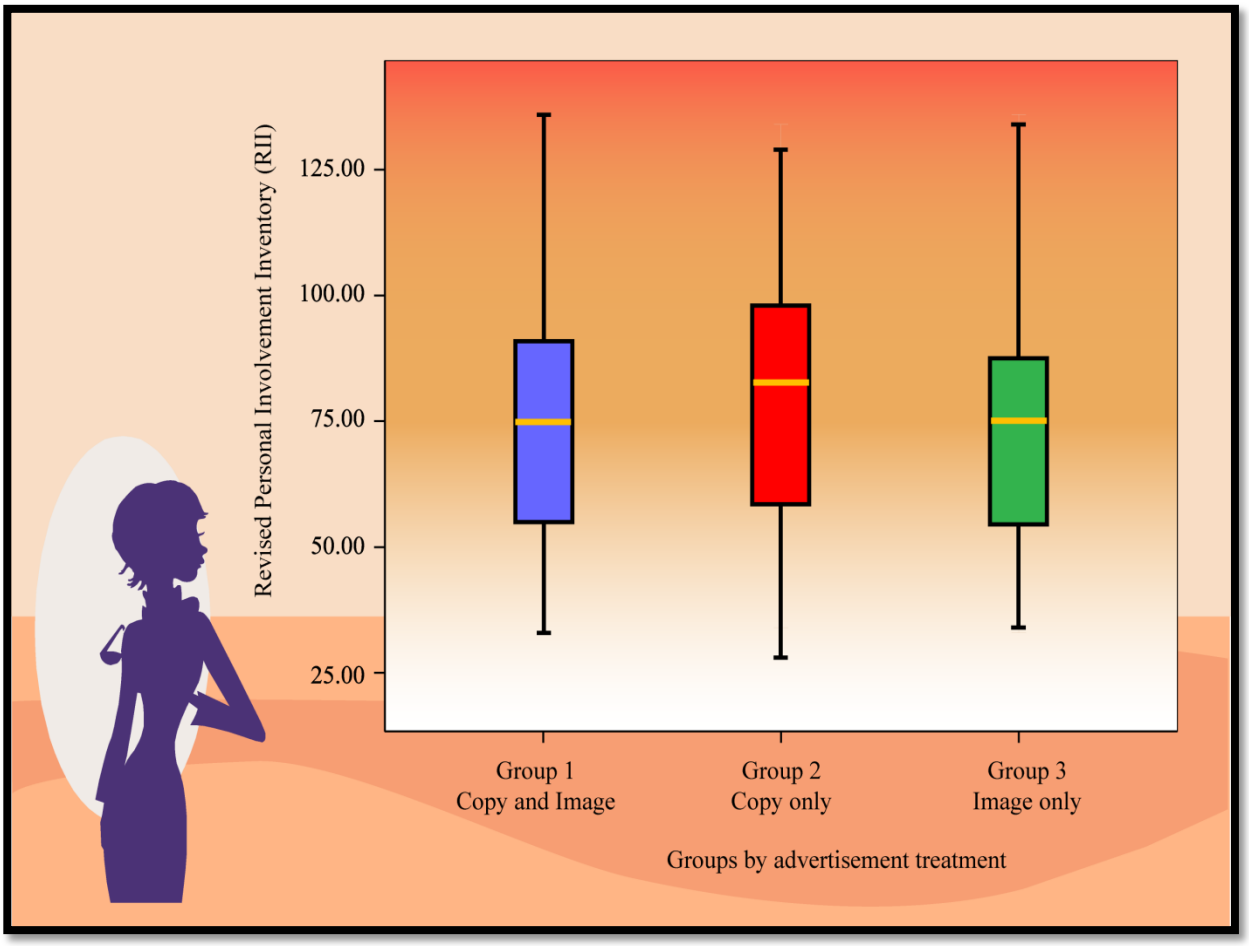


Figure 20. **Distribution of RPII for the three treatment groups using box-plots**

whiskers. However, the differences, at a glance, did not appear to be significant. There were no outlier values for any of the groups. Outliers are those values that are "…more than 1.5 box-lengths away from the box" (Kinnear & Gray, 1999, p.98).

The statistic for skewness was divided by the value for its error and the statistic for kurtosis was divided by its error to test for deviations from the normality. Because the results were no higher than 5.5, this gave enough confidence to believe that the distributions were normal and no further transformation was needed. Visual inspection not only of the box-plots but also of the histograms plotted in Figure 21 showed no concern for non-normal kurtosis or skewness. The histograms for each group plotted in Figure 21 show the overlays of the normal and values for the mean and standard deviation for each group.

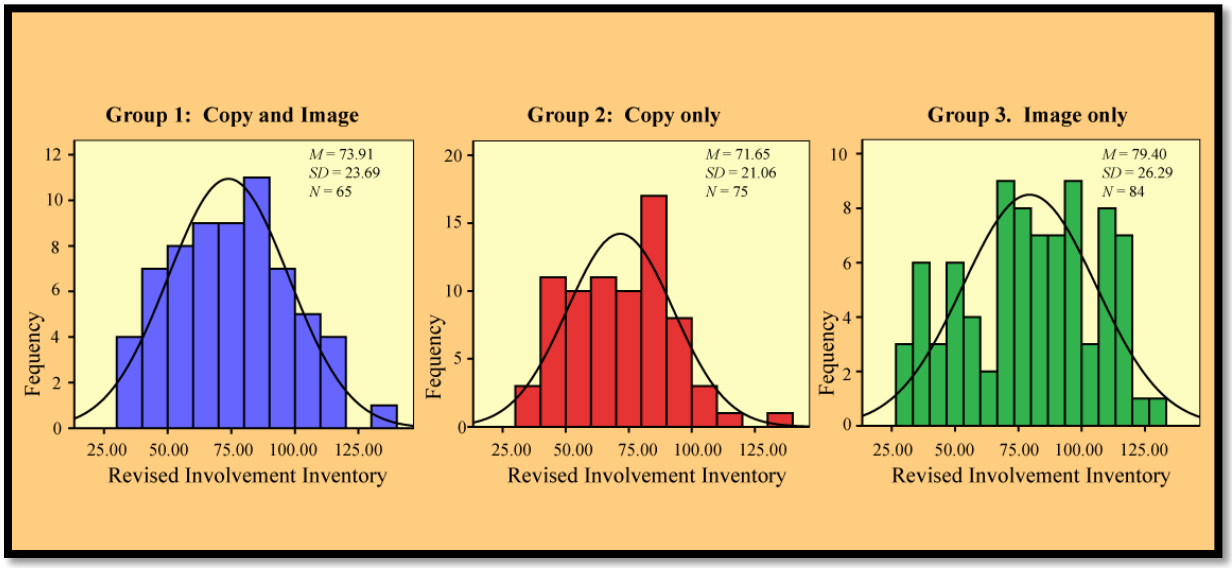


Figure 21. **Revised Personal Involvement Inventory (RPII) frequency distribution results**

An ANOVA did not reveal significant differences among groups on the basis of the Revised Personal Involvement Inventory (RPII) alone as $F(2, 221) = 2.223$, $p > .05$. As shown in Figure 21, the shape of the distributions looked alike as the standard deviation magnitudes were also alike. The range of scores was similar, between 100 and 103. Maximum values were 129,

134, and 136, while minimum values were 28, 34, and 33. Using the results from the RPII alone, it could be said that respondents were moderately involved with the advertisement treatments regardless of which treatment they viewed. The reliability on the RPII for each group was around α = .90.

Table 13 shows the reliability (α) results, means, and standard deviations for the four internal dimensions that make up the Revised Personal Involvement Inventory (RPII) for each group. The Original Personal Involvement Inventory (OPII) developed by Zaichkowsky (1985) and the different facets or dimensions of the Laurent and Kapferer Profile (1985) importance, pleasure, and risk, make up the four internal dimensions of the RPII and constitute the profile of involvement with the advertisement.

Table 13. **Responses on the four dimensions of the Revised Personal Involvement Inventory (RPII)**

Dimensions	Group 1 Copy and Image			Group 2 Copy Only			Group 3 Image Only		
	α = .906			α = .876			α = .939		
	M	***SD***	**α**	***M***	***SD***	**α**	***M***	***SD***	**α**
1. Original PII	50.26	22.65	.951	45.64	19.65	.922	58.01	24.12	.964
2. Factor Importance	16.63	8.09	.907	14.87	7.33	.847	19.16	8.06	.887
3. Factor Pleasure	18.81	7.86	.791	19.11	8.10	.745	20.76	8.32	.868
4. Factor Risk	14.27	4.14	.753	15.53	3.68	.700	11.94	3.32	.602

An ANOVA showed differences among the groups across the different advertisement treatments on the OPII and the importance and risk dimensions (see Table 14). Post-hoc tests,

with focus on Tukey, showed that on the original PII there were significant differences between Group 2: Copy only and Group 3: Image only. As a result, it could be said that respondents in Group 2 were less involved with the advertisement than those in Group 3. These groups were also significantly different on their perception of importance as Group 3 perceived the advertisement to be more important to them than Group 2. Most groups had similar standard deviations. These standard deviations were about one-third of the means, and these values were further indication that most respondents were moderately involved with the advertisement regardless of the advertisement treatment viewed.

Table 14. **ANOVA results for the RPII dimensions**

		SS	*df*	*MS*	*F*	*Sig.*
RPII	Between Groups	2537.04	2	1268.52	2.22	.111
	Within Groups	126124.67	221	570.70		
	Total	128661.71	223			
Original PII	Between Groups	6233.92	2	3116.96	6.28	.002**
	Within Groups	109702.82	221	496.39		
	Total	115936.75	223			
RPII Importance	Between Groups	748.50	2	374.25	6.10	.003**
	Within Groups	13625.50	222	61.38		
	Total	14374.00	224			
RPII Pleasure	Between Groups	173.83	2	86.92	1.32	.269
	Within Groups	14746.27	224	65.83		
	Total	14920.10	226			
RPII Risk	Between Groups	538.14	2	269.07	19.77	.000**
	Within Groups	3062.75	225	13.61		
	Total	3600.89	227			

* $p < .05$ ** $p < .01$

Because the risk dimension did not meet the Levene's test for homogeneity of variance, a non-parametric test, Kruskal-Wallis, was undertaken. This test revealed significant differences among groups on the RPII risk dimension $\chi^2(228, N = 30) = 39.97$, $p = .000$. A Man-Whitney U

test followed in order to determine where the differences were. Differences between Group 1 and Group 2 approached significance or $p > .075$. Box-plots in Figure 22 were used not only to visualize these differences in the distributions, but also to identify outlier values (Field, 2005). The box-plot also revealed a number of outlier values in all groups and especially in Group 2, the copy only treatment. Unlike previous box-plots, these showed more differences among groups. The median, given by the gold line inside the box, varied across groups. The size of the boxes also changed across groups. Not only was the box smaller for Group 2, but its whiskers were shorter. This group also had a small number of respondents who perceived the risk to be too high. Not unlike the other groups, this group also had at least one respondent who perceived no risk. Since these were only a limited numbers of cases, no additional statistical tests were performed.

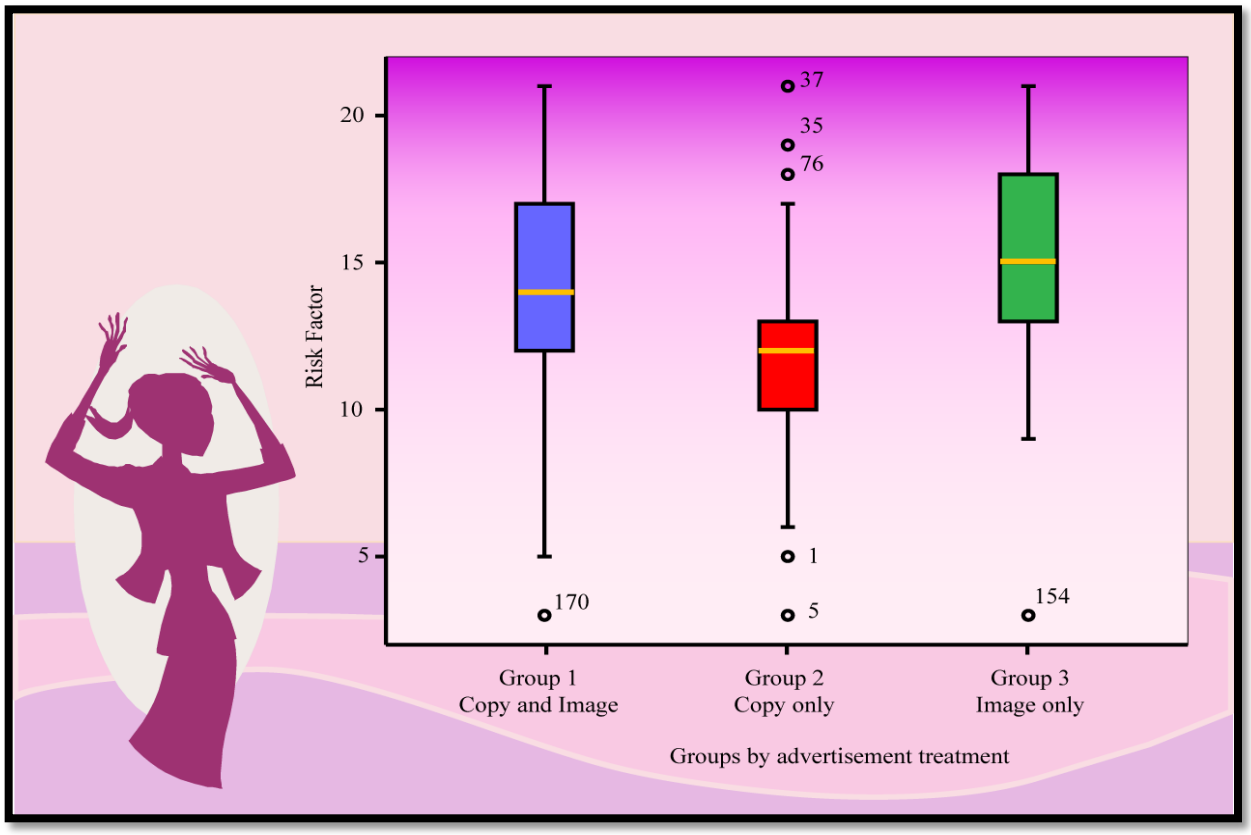


Figure 22. **Distribution of the risk dimension for the three treatment groups using box-plots**

Persuasiveness and Likelihood to Buy

As a way to determine the overall persuasiveness of the three advertisement treatments, two items were included in the form of two semantic differential adjectives, persuasive/not persuasive and more likely to buy/less likely to buy. These items were scored on a 7-point scale. Figure 23 shows the frequency distributions with the normal curve for persuasiveness. The values for the mean and standard deviation for each group are also provided in Figure 23. Although the results for skewness and kurtosis were below 5.5, it seemed that Group 1 has some degree of positive skewness. According to these results, the groups perceived the advertisements to be moderately to highly persuasive.

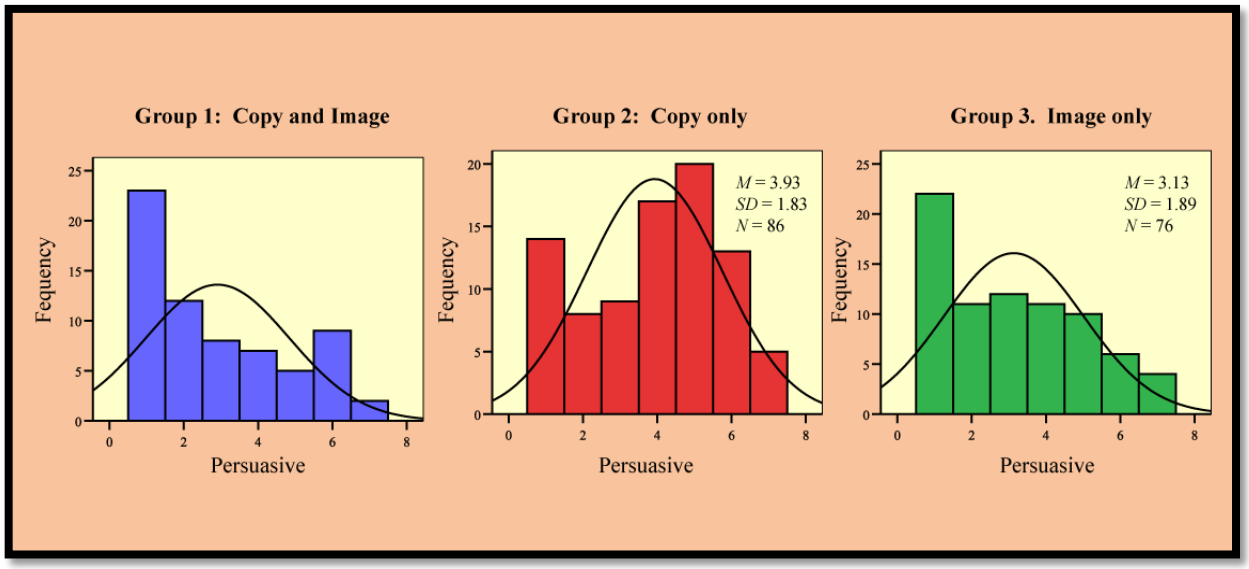


Figure 23. **Persuasiveness frequency distributions**

As with the previous item, respondents were asked about their likelihood to buy after viewing the advertisement. Histograms with the normal curve superimposed provided in Figure 24 showed some degree of positive skewness. Although the skewness was below 5.5 for all groups, Group 1 was as high as 4.3, and the high for Group 3 was 3.14. The standard deviations show additional concerns that the distributions were too wide.

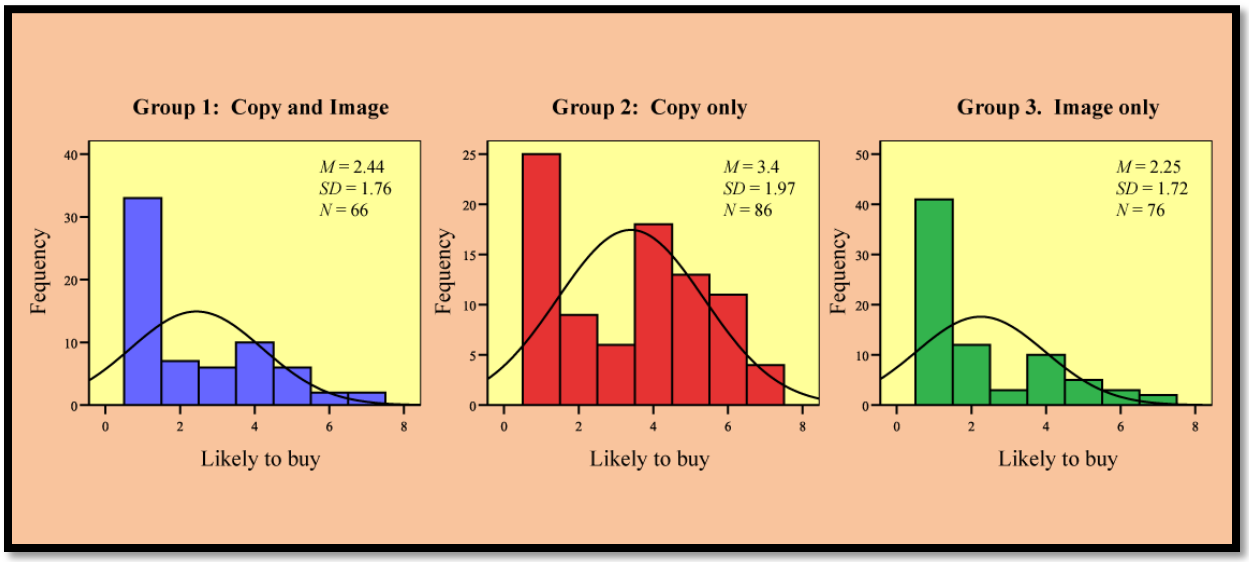


Figure 24. **Likely or not likely to buy frequency distributions**

An ANOVA was used to look at the differences among groups on these two items. Table 15 shows significant differences among groups for the two items. Because the distribution for likelihood to buy was positively skewed, the scores for this item were transformed using log(X + 2) and the analyses rerun.

Undertaking the transformation was successful in overcoming some of the positive skewness. The groups were still significantly different in terms of their likelihood to buy. The means ranged from .60 to .70, and the sizes of the standard deviations were high in comparison to the values of the means. As a result, these distributions were wide. As many as 30% in the Group 2: Copy only, 50% in Group 1: Copy and Image, and 54% in Group 3: Image only said that they were less likely to buy the product.

Although in the Post-hoc analysis focus was given to the results of the Tukey HSD test, other tests like Scheffe and Bonferroni showed similar results. According to these results, Group 2 was different from Group 3 and Group 1 on both questions. As a result, it could be said that there were differences among the groups in terms of persuasiveness and likelihood to buy.

Respondents in Group 2 had a higher overall persuasiveness average than respondents in the other two groups. Group 2 respondents were also more likely to buy the product.

Table 15. **ANOVA results for the persuasiveness and likelihood to buy items**

		SS	*df*	*MS*	*F*	*Sig.*
Persuasive	Between Groups	45.332	2	22.666	6.425	.002**
	Within Groups	793.720	225	3.528		
	Total	839.053	227			
Likely to buy	Between Groups	61.145	2	30.572	9.134	.000**
	Within Groups	753.066	225	3.47		
	Total	814.211	227			

* $p < .05$ ** $p < .01$

Hypotheses Testing

Hypotheses were developed based on the review of literature. Results of the tests of the hypotheses are presented in this section.

H1. Respondents' level of involvement with an advertisement for a controversial apparel product and fashion involvement will be moderated by the type of advertisement treatment viewed: copy and image, copy only, or image only.

As a result of moderation, these results were anticipated:

a) The relationship between involvement with an advertisement and fashion involvement among respondents who saw the copy and image advertisement would be moderate for both less and more fashion involved individuals;

b) The relationship between involvement with an advertisement and fashion involvement among respondents who saw the copy only advertisement would be lower for those respondents who were less fashion involved and higher for those respondents who were more fashion involved;

c) The relationship between involvement with an advertisement and fashion involvement among respondents who saw the image only advertisement would be higher for those respondents who were less fashion involved and lower for those respondents who were more fashion involved.

Revised Personal Involvement Inventory (RPII)

Hypothesis 1 was initially tested using respondents' scores on the complete Revised Personal Involvement Inventory (RPII). As shown in Table 16, the multiple regression analysis (MR) with Group 1: Copy and Image dummy coded as the reference group did not show a significant ΔR^2 between the Main Effects Model (model 1) and the Full Model (model 2) when

Table 16. **Moderation analysis: The regression of involvement with the advertisement as measured by the RPII on fashion involvement (FI) as measured by the FII**

	B	***SE***	***β***	***t***	***Sig.***	***r***	***pr***	***sr***
M_1 Main Effects Model								
(Constant)	74.349	2.865		25.95	.000			
FI	2.541	.621	.264	4.088	.000	.273	.266	.263
Copy only D_1	4.239	3.826	.086	1.108	.269	.135	.074	.071
Image only D_2	-2.483	3.912	-.049	-.635	.526	-.105	-.043	-.041
Regression *MS* = 3814.126; $F(3, 220) = 7.158$; $p < .01$; $R^2 = .089$; Adjusted $R^2 = .077$ Residual *MS* = 532.815								
M_2 Full Effects Model								
(Constant)	74.283	2.880		25.79	.000			
FI	2.157	1.166	.224	1.850	.066	.273	.124	.119
Copy only D_1	4.132	3.845	.083	1.075	.284	.135	.073	.069
Image only D_2	-2.445	3.931	-.048	-.622	.535	-.105	-.042	-.040
FI X Copy only D_1	.923	1.527	.061	.605	.546	.214	.041	.039
FI X Image only D_2	.043	1.612	.003	.027	.979	.131	.002	.002
Regression *MS* = 2342.308; $F(5, 218) = 4.366$; $p < .01$; $R^2 = .091$; Adjusted $R^2 = .070$ Residual *MS* = 536.469								
$F(2, 218) = .251$; $\Delta R^2 = .002$; $p = .778$								

* $p < .05$ ** $p < .01$

the interaction terms were introduced. Thus, no moderation was statistically evident. For this reason, the regression of involvement with the advertisement as measured by the RPII on fashion involvement as measured by the FII was independent of type of advertisement treatment viewed.

Model 1 only explained 7.7% of the variance of involvement with the advertisement. A separate regression analysis showed that a model with fashion involvement as the sole independent variable where $F(1, 222) = 17.921$, $p < .01$ explained 7% of the variance of involvement with the advertisement, or as much variance as model 1.

Figure 25 shows a scatterplot of the data. Graphically, lines that are parallel indicate no interaction (Aiken & West, 1991). Although the scatterplot seemed to show lines that fan, because the MR did not show significant differences among the interaction terms, it can be concluded that the slopes of the variables were not significantly different. The formulas that describe these simple slopes are provided in Appendix F.

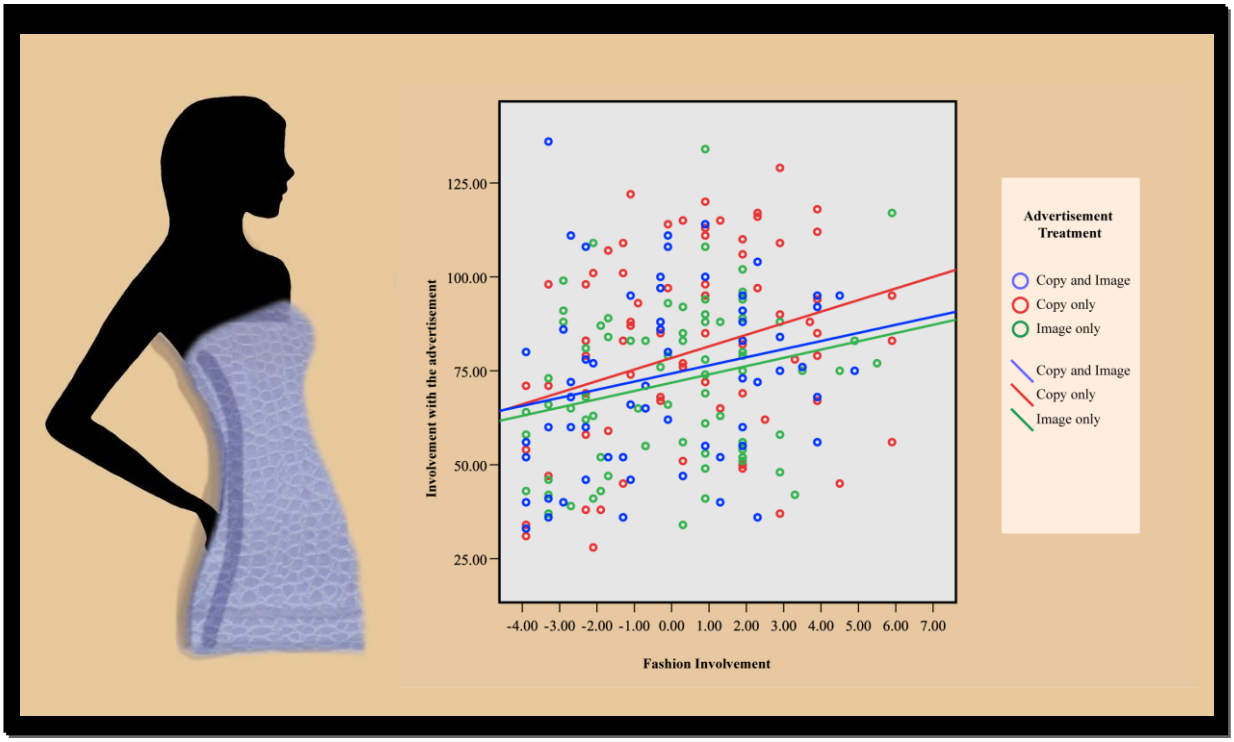


Figure 25. **Slopes of involvement with advertisement on fashion involvement for the advertisement treatment**

Original Personal Involvement Inventory (OPII) Dimension

Hypothesis 1 was next tested using respondents' scores on the Original Personal Involvement Inventory (OPII) dimension of the RPII. As shown in Table 17, the multiple regression analysis (MR) with Group 1: Copy and Image dummy coded as the reference group did not show a significant ΔR^2 between the Main Effects Model (model 1) and the Full Model (model 2) when the interaction terms were introduced. Thus, no moderation was evident. For this reason, the regression of involvement with the advertisement as measured by the OPII dimension of the RPII on fashion involvement as measured by the FII was independent of type of advertisement treatment viewed.

Table 17. **Moderation analysis: The regression of involvement with the advertisement as measured by the Original Personal Involvement Inventory on fashion involvement (FI) as measured by the FII**

	B	***SE***	***β***	***t***	***Sig.***	***r***	***pr***	***sr***
M_1 Main Effects Model								
(Constant)	50.657	2.680		18.901	.000			
FI	2.274	.581	.249	3.912	.000	.265	.255	.248
Copy only D_1	6.624	3.578	.141	1.851	.066	.218	.124	.117
Image only D_2	-4.826	3.659	-.100	-1.319	.189	-.187	-.089	-.084
Regression *MS* = 4456.761; $F(3, 220) = 9.560$; $p < .01$; $R^2 = .115$; Adjusted $R^2 = .103$ Residual *MS* = 466.211								
M_2 Full Effects Model								
(Constant)	50.630	2.695		18.790	.000			
FI	2.119	1.091	.232	1.942	.053	.265	.130	.124
Copy only D_1	6.510	3.597	.139	1.810	.072	.218	.008	.007
Image only D_2	-4.834	3.678	-.100	-1.314	.190	-.187	-.013	-.013
FI X Copy only D_1	.596	1.428	.041	.417	.677	.269	.028	.027
FI X Image only D_2	-.264	1.509	-.016	-.175	.861	-.139	-.012	-.011
Regression *MS* = 2712.588; $F(5, 218) = 5.776$; $p < .01$; $R^2 = .117$; Adjusted $R^2 = .097$ Residual *MS* = 469.605								
$F(2, 218) = .205$; $\Delta R^2 = .002$; $p = .815$								

* $p < .05$ ** $p < .01$

Model 1 and model 2 were statistically significant, but the amount of ΔR^2 was extremely small thus not enough to have moderation. A separate model $F(1, 222) = 16.755$, $p < .01$ with fashion involvement as the sole independent variable explained 7% of the variance or almost as much as model 1 where the amount of variance explained was 7.7%.

Figure 26 shows a scatterplot of the data. Graphically, lines that are parallel indicate no interaction (Aiken & West, 1991). Although the scatterplot seemed to show lines that fan, because the MR did not show significant differences among the interaction terms, it can be concluded that the slopes of the variables were not significantly different and only varied slightly. The formulas that describe these simple slopes are provided in Appendix F.

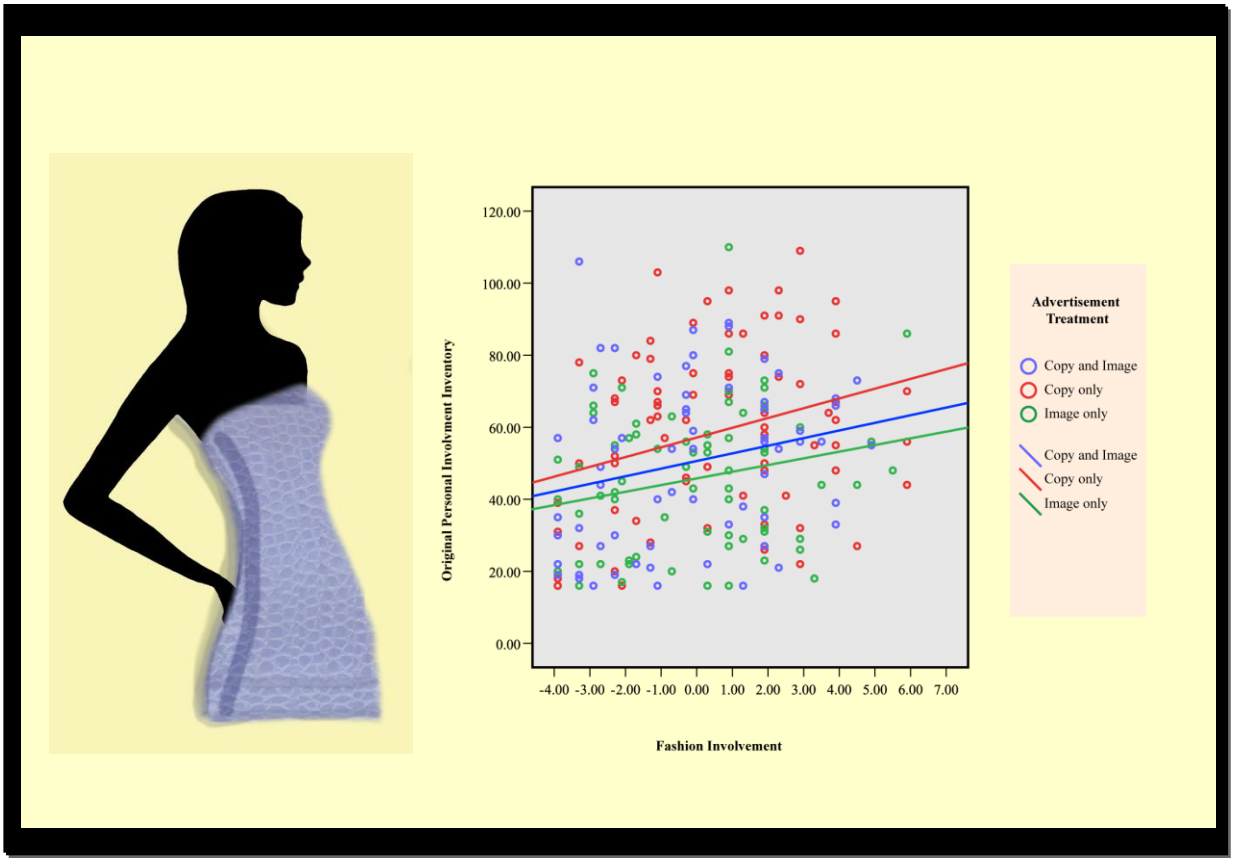


Figure 26. **Slopes of involvement with advertisement as measured by the Original Personal Involvement Inventory dimension on fashion involvement for the advertisement treatment**

Importance Dimension

Hypothesis 1 was further tested using respondents' scores on the importance dimension of the RPII. As shown in Table 18, the multiple regression analysis (MR) with Group 1: Copy and Image dummy coded as the reference group did not show a significant ΔR^2 between the Main Effects Model (model 1) and the Full Model (model 2) when the interaction terms were introduced. Thus, no moderation was statistically evident. For this reason, the regression of involvement with the advertisement as measured by the importance dimension of the RPII on fashion involvement as measured by the FII was independent of type of advertisement treatment viewed.

Table 18. **Moderation analysis: The regression of involvement with the advertisement as measured by the importance dimension on fashion involvement (FI) as measured by the FII**

	B	***SE***	***β***	***t***	***Sig.***	***r***	***pr***	***sr***
M_1 Main Effects Model								
(Constant)	16.746	.952		17.584	.000			
FI	.665	.206	.207	3.230	.001	.222	.212	.207
Copy only D_1	2.228	1.268	.135	1.757	.080	.211	.117	.112
Image only D_2	-1.824	1.300	-.108	-1.403	.162	-.189	-.094	-.090
Regression *MS* = 454.270; $F(3, 221) = 7.716$; $p < .01$; $R^2 = .095$; Adjusted $R^2 = .083$ Residual *MS* = 58.874								
M_2 Full Effects Model								
(Constant)	16.737	.956		17.514	.000			
FI	.613	.387	.191	1.584	.115	.222	.106	.102
Copy only D_1	2.163	1.272	.131	1.701	.090	.211	.114	.109
Image only D_2	-1.839	1.305	-.108	-1.410	.160	-.189	-.095	-.090
FI X Copy only D_1	.312	.505	.062	.617	.538	.200	.042	.040
FI X Image only D_2	-.237	.535	-.041	-.443	.658	.071	-.030	-.028
Regression *MS* = 287.581; $F(5, 219) = 4.869$; $p < .01$; $R^2 = .100$; Adjusted $R^2 = .079$ Residual *MS* = 59.069								
$F(2, 219) = .636$; $\Delta R^2 = .005$; $p = .531$								

* $p < .05$ ** $p < .01$

Model 1 explained only 8.3% of the variance in involvement with the advertisement. Fashion involvement had significant effects on model 1. A separate model with only fashion involvement $F(1, 219) = 11.528$, $p < .01$ explained 4.5% of the variance in involvement with the advertisement.

Figure 27 shows a scatterplot of the data. Graphically, lines that are parallel indicate no interaction (Aiken & West, 1991). Although the scatterplot seemed to show lines that fan, because the MR did not show significant differences among the interaction terms, it can be concluded that the slopes of the variables were not significantly different and only varied slightly. The formulas that describe these simple slopes are provided in Appendix F.

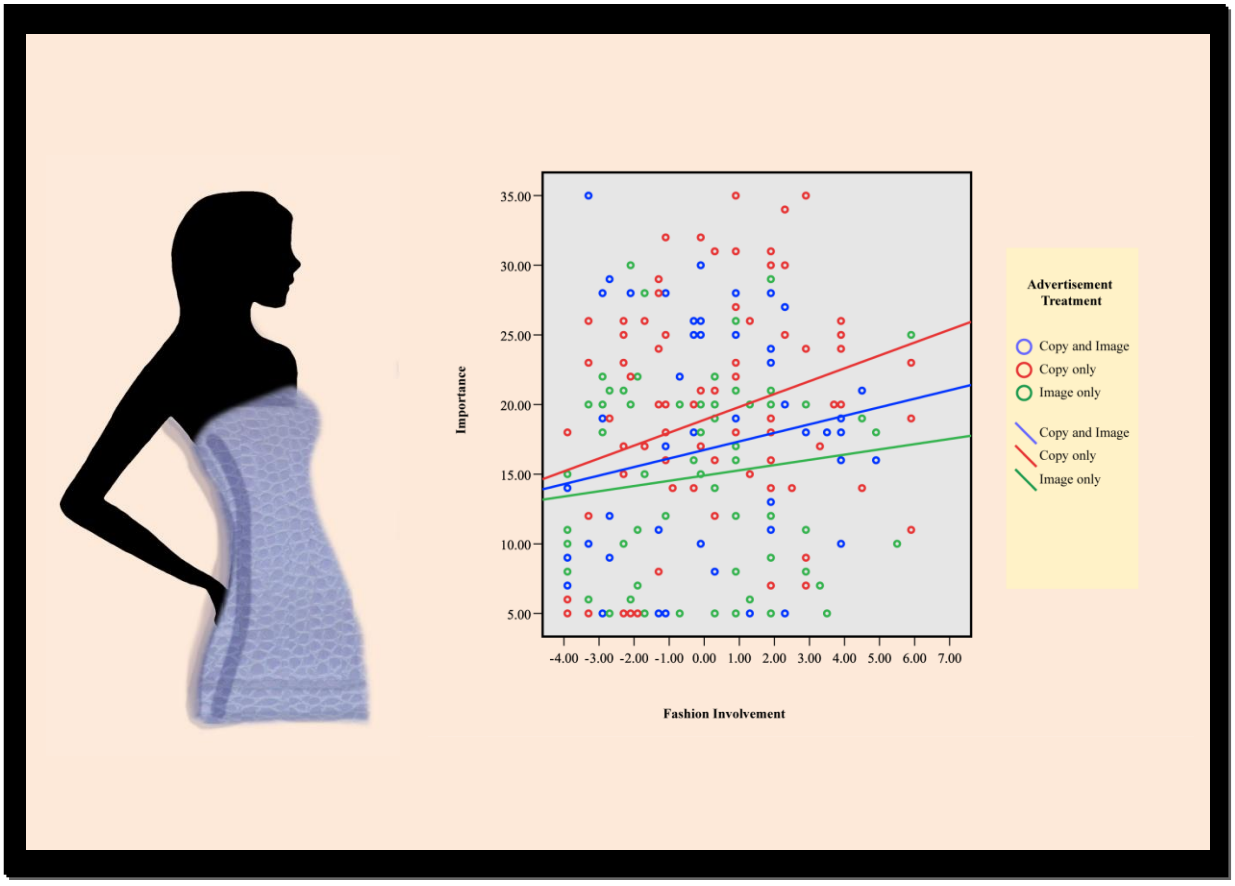


Figure 27. **Slopes of involvement with advertisement as measured by the importance dimension on fashion involvement for the advertisement treatment**

Pleasure Dimension

Hypothesis 1 was also tested using respondents' scores on the pleasure dimension of the RPII. As shown in Table 19, the multiple regression analysis (MR) with Group 1: Copy and Image dummy coded as the reference group did not show a significant ΔR^2 between the Main Effects Model (model 1) and the Full Model (model 2) when the interaction terms were introduced. Thus, no moderation was statistically evident. For this reason, the regression of involvement with the advertisement as measured by the pleasure dimension of the RPII on fashion involvement as measured by the FII was independent of type of advertisement treatment viewed.

Table 19. **Moderation analysis: The regression of involvement with the advertisement as measured by the pleasure dimension on fashion involvement (FI) as measured by the FII**

	B	***SE***	***β***	***t***	***Sig.***	***r***	***pr***	***sr***
M_1 Main Effects Model								
(Constant)	18.938	.972		19.491	.000			
FI	.791	.212	.242	3.731	.000	.249	.242	.241
Copy only D_1	1.563	1.298	.093	1.204	.230	.107	.080	.078
Image only D_2	.219	1.328	.013	.165	.869	-.047	.011	.011
Regression *MS* = 346.704; $F(3, 223) = 5.570$; $p < .01$; $R^2 = .070$; Adjusted $R^2 = .057$ Residual *MS* = 62.242								
M_2 Full Effects Model								
(Constant)	18.899	.976		19.363	.000			
FI	.534	.397	.163	1.345	.180	.249	.090	.087
Copy only D_1	1.557	1.305	.093	1.193	.234	.107	-.026	-.025
Image only D_2	.262	1.333	.015	.197	.844	-.047	-.034	-.033
FI X Copy only D_1	.392	.521	.076	.753	.452	.162	.051	.049
FI X Image only D_2	.318	.550	.054	.579	.563	.003	.039	.037
Regression *MS* = 215.611; $F(5, 221) = 3.442$; $p < .01$; $R^2 = .072$; Adjusted $R^2 = .051$ Residual *MS* = 62.634								
$F(2, 221) = .303$; $\Delta R^2 = .003$; $p = .739$								

* $p < .05$ ** $p < .01$

A separate model $F(1, 225) = 14.924$, $p < .01$ with fashion involvement as the sole independent variable explained 5.8% of the variance with the advertisement. When this sole model is compared with model 1 there is virtually no difference in variance explained by the addition of the advertisement treatment.

Figure 28 shows a scatterplot of the data. Graphically, lines that are parallel indicate no interaction (Aiken & West, 1991). Although the scatterplot seemed to show lines that fan, because the MR did not show significant differences among the interaction terms, it can be concluded that the slopes of the variables were not significantly different and only varied slightly. The formulas that describe these simple slopes are provided in Appendix F.

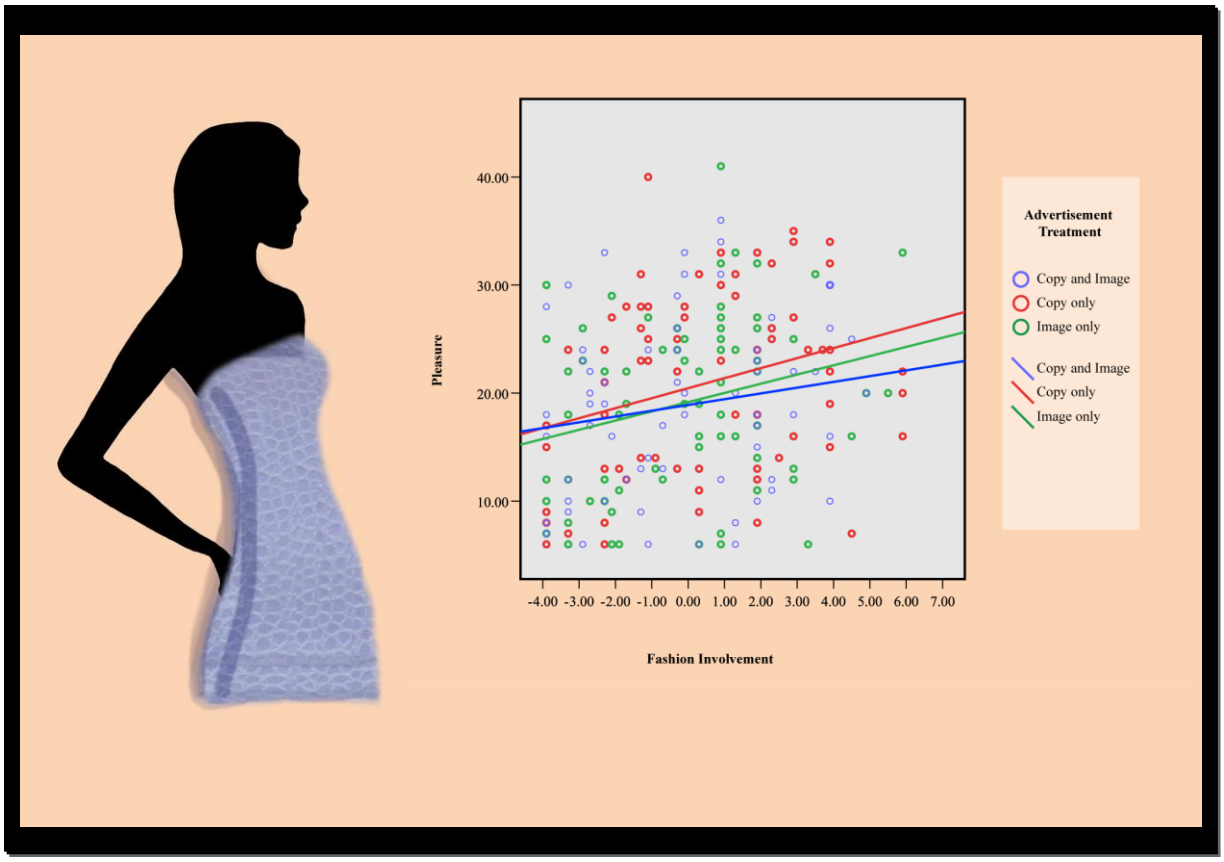


Figure 28. **Slopes of involvement with advertisement as measured by the pleasure dimension on fashion involvement for the advertisement treatment**

Risk Dimension

Lastly Hypothesis 1 was tested using respondents' scores on the risk dimension of the RPII. As shown in Table 20, the multiple regression analysis (MR) with Group 1: Copy and Image dummy coded as reference group did not show a significant ΔR^2 between the Main Effects Model (model 1) and the Full Model (model 2) when the interaction terms were introduced. Thus, no moderation was statistically evident. For this reason, the regression of involvement with the advertisement as measured by the risk dimension of the RPII on fashion involvement as measured by the FII was independent of type of advertisement treatment viewed.

Table 20. **Moderation analysis: The regression of involvement with the advertisement as measured by the risk dimension on fashion involvement (FI) as measured by the FII**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
M_1 Main Effects Model								
(Constant)	14.264	.455		31.344	.000			
FI	-.056	.099	-.035	-.561	.575	-.062	-.037	-.035
Copy only D_1	-2.306	.606	-.281	-3.803	.000	-.366	-.246	-.234
Image only D_2	1.258	.622	.149	2.024	.044	.305	.134	.125
Regression *MS* = 180.816; $F(3, 224) = 13.243$; $p < .01$; $R^2 = .151$; Adjusted $R^2 = .139$ Residual *MS* = 13.654								
M_2 Full Effects Model								
(Constant)	14.254	.457		31.157	.000			
FI	-.126	.186	-.079	-.678	.499	-.062	-.045	-.042
Copy only D_1	-2.312	.609	-.282	-3.793	.000	-.366	-.104	-.097
Image only D_2	1.269	.625	.150	2.030	.044	.305	.022	.020
FI X Copy only D_1	.126	.243	.050	.517	.605	-.344	.035	.032
FI X Image only D_2	.064	.258	.022	.247	.805	.281	.017	.015
Regression *MS* = 109.233; $F(5, 222) = 7.938$; $p < .01$; $R^2 = .152$; Adjusted $R^2 = .133$ Residual *MS* = 13.760								
$F(2, 222) = .135$; $\Delta R^2 = .001$; $p = .874$								

* $p < .05$ ** $p < .01$

Model 1 explained 13.9% of the variance of involvement with the advertisement. Unlike previous models, fashion involvement did not have a significant effect on level of involvement with the advertisement when included in model 1 or when it used as the sole independent variable in a separate regression model, $F(1, 226) = .862$, $p = .354$.

Figure 29 shows a scatterplot of the data. Graphically, lines that are parallel indicate no interaction (Aiken & West, 1991). Although the scatterplot seemed to show lines that fan, because the MR did not show significant differences among the interaction terms, it can be concluded that the slopes of the variables were not significantly different and only varied slightly. The formulas that describe these simple slopes are provided in Appendix F.

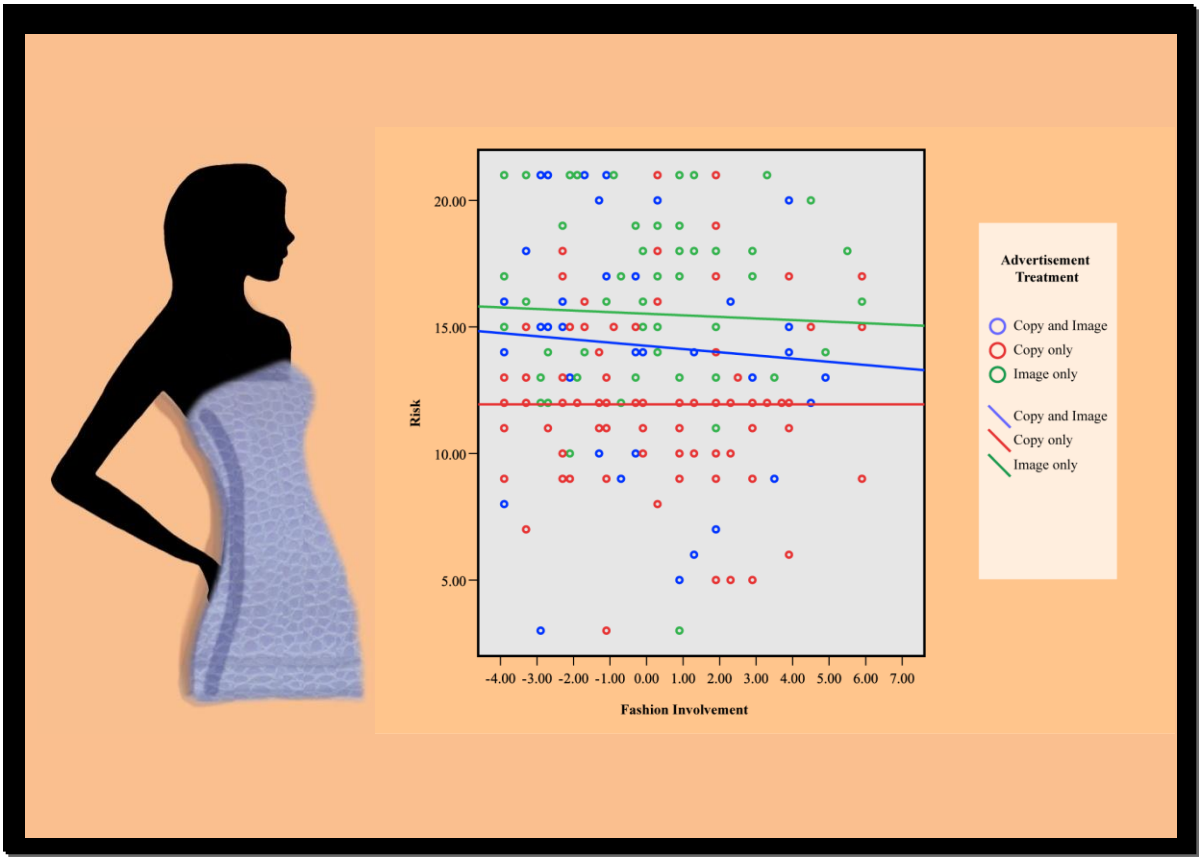


Figure 29. **Slopes of involvement with advertisement as measured by the risk dimension on fashion involvement for the advertisement treatment**

Tests of Hypothesis 1 using the RPII and its four dimensions: (1) Original Personal Involvement Inventory (OPII), (2) importance, (3) pleasure, and (4) risk produced no moderation as a result of type of advertisement treatment viewed: (1) copy and image, (2) copy only, and (3) image only on respondents' level of involvement with the advertisement on level of fashion involvement.

In summary, based on the results of the statistical analyses, H1 was rejected. The regression of involvement with the advertisement on fashion involvement was not moderated by advertisement treatment. Added tests using the RPII's dimensions yielded no moderation effects.

H2. For respondents in all treatment groups, the relationship between advertisement involvement and fashion involvement will not be moderated by their demographic characteristics: race, age, marital status, college education, employment status, and affluence.

Table 21 provides a brief summary of all the multiple regression analyses used to test the moderation of advertisement involvement on fashion involvement dependent on demographic characteristics. As shown in this table, the only significant ΔR^2 resulted when the regression of

Table 21. **Summary of the moderation effects of demographic characteristics on the relationship between advertisement involvement as measured by the RPII and its dimensions and fashion involvement (FI) as measured by the FII**

Demographic Characteristic	RPII			OPII			Importance			Pleasure			Risk		
	M_1	M_2	ΔR^2	M_1	M_2	ΔR^2	M_1	M_2	ΔR^2	M_1	M_2	ΔR^2	M_1	M_2	ΔR^2
Race	**	**	NS	**	**	NS	*	*	NS	**	**	NS	NS	NS	NS
Age	**	**	NS	**	**	NS	*	*	NS	**	**	*	NS	NS	NS
Marital Status	**	**	NS	**	**	NS	**	*	NS	**	**	NS	NS	NS	NS
Education	**	**	NS	**	**	NS	**	**	NS	**	**	NS	NS	NS	NS
Employment Status	**	**	NS	**	**	NS	**	*	NS	**	**	NS	*	NS	NS
Affluence	**	**	NS	**	**	NS	**	**	NS	**	**	NS	NS	NS	NS

Note. M_1= Main Effects Model; M_2 = Full Effects Model; ΔR^2 = R^2 change from the addition of the product term
* $p < .05$ ** $p < .01$ NS = Not significant

involvement with an advertisement as measured by the pleasure dimension on fashion involvement was moderated by age. The joint test of B_4 and B_5 producing the only significant ΔR^2 as given by $F(2, 216) = 3.339$; $\Delta R^2 = .028$; $p < .05$ can be seen in Table 22. Although the $\Delta R^2 = .028$ might seem low, it is considered important effect in the social sciences (Aguinis, 2004, p.140). Figure 30 shows a scatterplot to help visualize this moderation with age. All tables providing the complete results of the models can be found in Appendix G.

Table 22. **Moderation analysis: The regression of involvement with the advertisement as measured by the pleasure dimension on fashion involvement (FI) as measured by the FII was dependent on age**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
M_2 Full Effects Model								
(Constant)	19.429	.960		20.240	.000			
FI	.818	.217	.250	3.763	.000	.250	.247	.246
Age 41-60 D_1	.585	1.222	.036	.479	.000	.026	.032	.031
Age 61-over D_2	-.428	1.594	-.020	-.269	.633	-.063	-.018	-.018
Regression *MS* = 316.938; $F(3, 218) = 5.027$; $p < .01$; $R^2 = .065$; Adjusted $R^2 = .052$ Residual *MS* = 63.049								
M_2 Full Effects Model								
(Constant)	19.642	.976		20.124	.000			
FI	.497	.402	.152	1.239	.217	.250	.084	.080
Age 41-60 D_1	.431	1.227	.026	.351	.726	.026	.024	.023
Age 61-over D_2	-1.206	1.606	-.057	-.751	.454	-.063	-.051	-.049
FI X Age 41-60 D_1	.742	.491	.171	1.512	.132	.283	.102	.098
FI X Age 61-over D_2	-.832	.714	-.093	-1.165	.245	-.023	-.079	-.076
Regression *MS* = 272.595; $F(5, 216) = 4.416$; $p < .01$; $R^2 = .093$; Adjusted $R^2 = .072$ Residual *MS* = 61.725								
$F(2, 216) = 3.339$; $\Delta R^2 = .028$; $p < .05$*								

* $p < .05$ ** $p < .01$

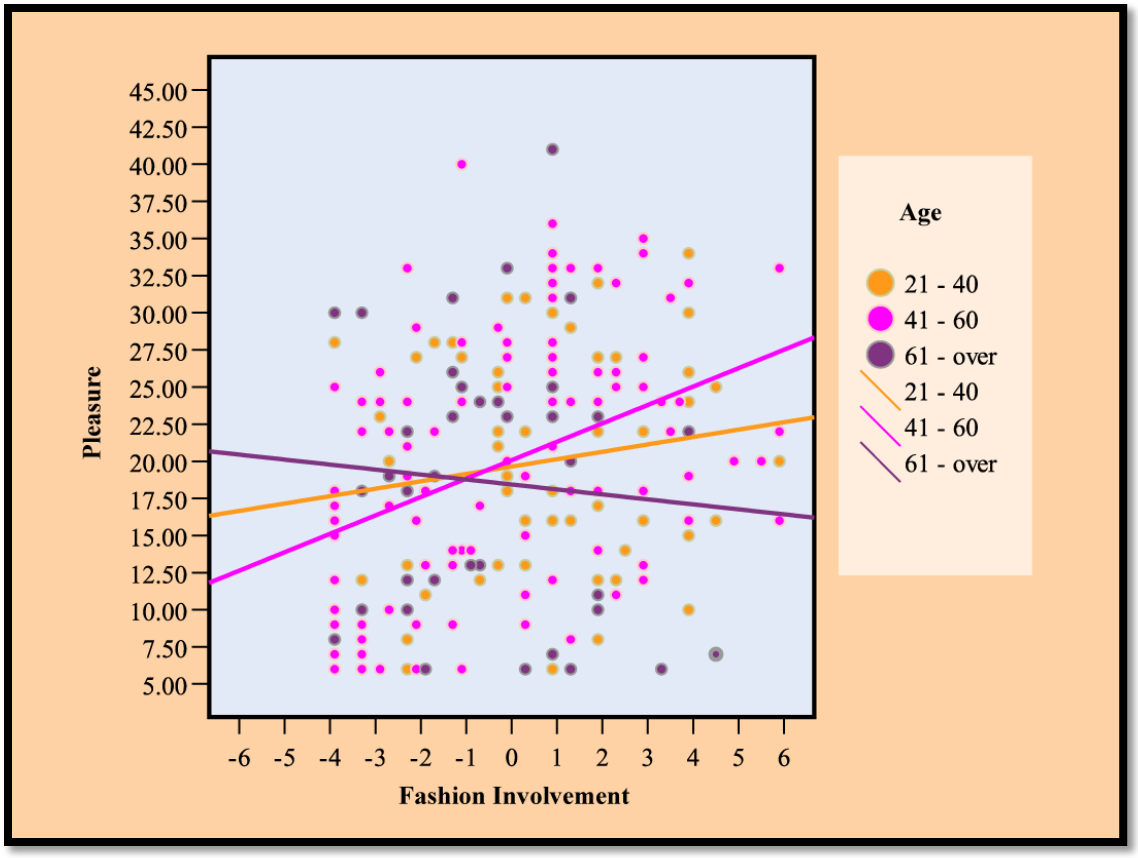


Figure 30. **Scatterplot with the slopes for advertisement involvement as measured by the pleasure dimension on fashion involvement for the three age groups**

The scatterplot reveals that at the mean of fashion involvement (FI) as measured by the FII, the 41-60 age group has a higher pleasure score (20.073) than the 21-40 age group (19.642) or the 60-over age group (18.436). The point is derived when the regression lines are calculated. The complete set of calculations is included in Appendix H. At this point, the distance between the comparison age group 21-40 and the 41-60 age group is .431 and between the comparison age group and the 61-over age group is 1.206. Because the intersection between the lines falls within the useful range of FII scores, the interaction is disordinal. The 21-40 age group line crosses the 41-60 age group line at FII = -.581; the 21-40 age group line crosses the 60-over age group line at FII = -1.450; and the 41-60 crosses the 60-over line at FII = -1.040. The calculation of these intersection points is given in Appendix I.

As seen in Figure 30, at low levels of fashion involvement, the 61-over age group experienced a higher degree of advertising involvement as measured on the pleasure dimension of RPII than the 41-60 age group. While at higher levels of fashion involvement, the 41-60 age group experienced a higher degree of advertising involvement as measured on the pleasure dimension of the RPII than the 61-over age group. Aiken and West (1991) recommend additional testing that includes calculating the simple slopes of each group and their significance. These post hoc analyses revealed that the simple slope for age group 41-60 was the only slope significantly different from zero. As a result, this group's slope had the steepest effect on involvement with the advertisement when there was one unit increase on fashion involvement. The calculations for this test are given in Appendix I. Thus, for the 41-60 age group there is a significant positive and increasing degree of change in pleasure involvement with the advertisement as their level of fashion involvement increased.

In summary, based on the results of the statistical analyses, H2 was partially accepted. The regression of advertisement involvement as measured on the pleasure dimension of the RPII and fashion involvement was found to be moderated by one demographic characteristic: age.

H3. For respondents in all advertisement treatment groups, there will be a significant relationship between fashion involvement and ownership of alligator, exotic, non-exotic and faux leather products.

As shown in Table 23, the 1-tail Pearson correlation analyses yielded significant positive and increasing correlations between fashion involvement (FI) as measured by the FII and ownership of alligator, exotic, non-exotic and faux leather products. For this reason, H3 was accepted.

H4. For respondents in all advertisement treatment groups, there will be a significant relationship between advertisement involvement and ownership of alligator, exotic, non-exotic and faux leather products.

Table 23 shows the results of the 1-tail Pearson correlation analyses used to test the relationship between advertisement involvement as measured by the RPII and ownership of alligator, exotic, non-exotic and faux leather products. The table also shows the correlation results for the four dimensions of the RPII.

Ownership of alligator leather was significantly correlated with advertisement involvement as measured by the RPII and its four dimensions: (1) Original Personal Involvement Inventory (OPII), (2) importance, (3) pleasure, and (4) risk. These correlations were positive and increasing for the OPII, importance, and pleasure. Thus, those who owned alligator leather products experienced higher levels of advertisement involvement, importance, and pleasure. These respondents experienced negative and decreasing levels of involvement for the risk factor. Thus ownership of alligator leather was related to lower levels of risk perception with their advertisement involvement.

Ownership of exotic leather only had one significant correlation with advertisement involvement on the pleasure dimension. This was positive and increasing. Thus, those who owned exotic leather products experienced higher levels pleasure from their involvement with the advertisement.

There were no significant correlations between ownership of non-exotic leather and level of advertisement involvement as measured on the RPII any of its dimensions. This would indicate respondents who owned non-exotic leather apparel products were neutral or indifferent in their level of advertisement involvement.

Correlations were significant between ownership of faux leather apparel and level of advertisement involvement, OPII, and pleasure. These were also positive and increasing. These results indicated that respondents who owned faux leather apparel products experienced higher levels of advertisement involvement as measured by the RPII and the OPII and pleasure. Based on the results of the analyses, H4 was partially accepted.

Table 23. **Pearson correlation analyses: The relationship between ownership of alligator, exotic, non-exotic, and faux leather products and fashion involvement as measured by the FII and between ownership and advertisement involvement as measured by the RPII and its dimensions**

	1-tail	1-tail	1-tail	1-tail	2-tail	1-tail	2-tail
	Own	**FII**	**RPII**	**OPII**	**Importance**	**Pleasure**	**Risk**
All Respondents	Alligator	.117*	.316**	.326*	.246**	.281**	-.236**
	Exotic	.135*	.109	.110	.052	.131*	-.072
	Non-Exotic	.121*	.097	.091	.066	.101	.034
	Faux	.187**	.155*	.134*	.103	.154*	-.023

* $p < .05$ ** $p < .01$

H5. For respondents in all advertisement treatment groups, there will be a significant relationship between fashion involvement and noticing clothing featured in the media: advertisements, worn by celebrities, on television, in movies, magazines, the Internet, and up-scale catalogs.

Results from the 1-tail Pearson correlation analyses given in Table 24 showed that there were significant relationships between level of fashion involvement as measured by the FII and noticing clothing in media: advertisements, worn by celebrities, on television, in movies, magazines, the Internet, and up-scale catalogs. These relationships were positive and increasing; as level of fashion involvement increased, respondents were more likely to notice clothing featured in the media. Thus, H5 was accepted.

Table 24. **Pearson correlation analyses: The relationship between media exposure and fashion involvement as measured by the FII and between media exposure and advertisement involvement as measured by the RPII and its dimensions**

		1-tail	1-tail	1-tail	1-tail	1-tail	2-tail
	Media	**FII**	**RPII**	**OPII**	**Importance**	**Pleasure**	**Risk**
All respondents	Advertised	.253**	.217**	.209**	.128*	.228**	-.061
	Used by celebrity	.312**	.216**	.206**	.137*	.243**	-.061
	Movies	.417**	.305**	.306**	.187**	.363**	-.175**
	Television	.426**	.331**	.328**	.250**	.345**	-.153*
	Magazines	.473**	.330**	.321**	.254**	.314**	-.106
	Internet	.299**	.180**	.174**	.160**	.094	.010
	Up-scale catalogs	.348**	.195**	.177**	.160**	.127*	.040

* $p < .05$ ** $p < .01$

H6. For respondents in all advertisement treatment groups, there will be a significant relationship between advertisement involvement and noticing clothing featured in the media: advertisements, worn by celebrities, on television, in movies, magazines, the Internet, and up-scale catalogs.

As can be seen in Table 24, results from the 1-tail Pearson correlation analyses showed that there were significant relationships between media involvement and involvement with the advertisement as measured by the RPII. These relationships were positive and increasing. Consequently, as the respondents' level of media exposure increased, their level of advertisement involvement also increased.

Also shown in Table 24 are other significant relationships. The OPII, importance, and pleasure dimensions had positive and increasing relationships for Internet exposure and advertisement involvement on the pleasure dimension. This relationship was not significant. The relationship with the advertisement treatment as measured by the risk dimension was only significant for clothing noticed in movies and television. However, because the sign of the relationship between these two mediums and risk was negative, the results indicated that at higher levels of television and movie exposure, the advertisement involvement as measured by the risk diminished. Given the overall results of the analyses, H6 was accepted.

H7. For respondents in different advertisement treatment groups, there will be a significant relationship between fashion involvement and persuasiveness to buy.

As shown in Table 25, the 1-tail Pearson correlation analyses showed that there were significant relationships between fashion involvement and persuasiveness to buy only for respondents on Group 2: Copy only. This relationship was positive and increasing. Consequently, as the level of fashion involvement increased among respondents in this group, their agreement that the advertisement was persuasive also increased. H7 was partially accepted.

H8. For respondents in different advertisement treatment groups, there will be a significant relationship between fashion involvement and likelihood to buy.

The 1-tail Pearson correlation analyses provided in Table 25 showed that there were significant relationships between fashion involvement and likelihood to buy for Groups 1 and 2, but not for Group 3. The significant relationships were positive and increasing. Consequently, as fashion involvement increased, the likelihood to buy the advertised product also increased. H8 was partially accepted.

Table 25. **Pearson correlation analyses: Relation of fashion involvement as measured by the FII and persuasiveness and fashion involvement and likelihood to buy**

Group		FII	
		1-tail Pearson	1-tail Pearson
		Persuasiveness	Likelihood to buy
1	Copy and Image	.092	.259*
2	Copy only	.206*	.341**
3	Image only	-.074	.193*

* $p < .05$ ** $p < .01$

H9. For respondents in different advertisement treatment groups, there will be a significant relationship between advertisement involvement and persuasiveness to buy.

As shown in Table 26, the 1-tail Pearson correlation analyses showed that there were highly significant relationships between advertisement involvement and persuasiveness to buy for all advertisement treatment groups. These were also positive and increasing relationships. As a result, for all respondents, as the level of advertisement involvement increased, their level of agreement about the advertisement treatments' persuasiveness also increased. Though all correlations were significant, the correlations for the image only group were lower than the other two groups and the correlation with the copy only group was very high. As previously noted in the description of respondents, the mean for Group 2 was significantly different from the means for Group 1 and Group 3 as shown in Figure 23. H9 was accepted.

H10. For respondents in different advertisement treatment groups, there will be a significant relationship between advertisement involvement and likelihood to buy.

The 1-tail Pearson correlation analyses provided in Table 26 showed that there were highly significant relationships between advertisement involvement and likelihood to buy the advertised product. These relations were also positive and increasing. Consequently, as advertisement involvement increased, the likelihood to buy the advertised product also increased. As in H9, while all of the relationships were highly significant, correlations for the image only group were lowest. However, the copy only group correlations were highest for advertisement involvement and likelihood to buy the advertised product. As previously noted in the description of respondents, the mean for Group 2 was significantly different from the means for Group 1 and Group 3 as shown in Figure 23. H10 was accepted.

Table 26. **Pearson correlation analyses: Relation of advertisement involvement and persuasiveness; and between advertisement involvement and likelihood to buy**

Group		RPII	
		1-tail Pearson	1-tail Pearson
		Persuasiveness	Likelihood to buy
1	Copy and Image	.657**	.685**
2	Copy only	.616**	.787**
3	Image only	.526**	.526**

* $p < .05$ ** $p < .01$

Table 27 provides an overview of the hypotheses developed and tested in this study. The table also provides a quick review of the methods used in the analyses used and the results of these tests.

Table 27. **Review of test hypotheses results**

Test Hypothesis	**Analysis Method** **Result**
H1. Respondents' level of involvement with an advertisement for a controversial apparel product and fashion involvement will be moderated by the type of advertisement treatment viewed: copy and image, copy only, or image only.	MR Rejected
H2. For respondents in all treatment groups, the relationship between advertisement involvement and fashion involvement will not be moderated by their demographic characteristics: race, age, marital status, college education, employment status, and affluence.	MR Partially accepted
H3. For respondents in all advertisement treatment groups, there will be a significant relationship between fashion involvement and ownership of alligator, exotic, non-exotic and faux leather products.	Pearson Accepted
H4. For respondents in all advertisement treatment groups, there will be a significant relationship between advertisement involvement and ownership of alligator, exotic, non-exotic and faux leather products.	Pearson Partially accepted
H5. For respondents in all advertisement treatment groups, there will be a significant relationship between fashion involvement and noticing clothing featured in the media: advertisements, worn by celebrities, on television, in movies, magazines, the Internet, and up-scale catalogs.	Pearson Accepted
H6. For respondents in all advertisement treatment groups, there will be a significant relationship between advertisement involvement and noticing clothing featured in the media: advertisements, worn by celebrities, on television, in movies, magazines, the Internet, and up-scale catalogs.	Pearson Accepted
H7. For respondents in different advertisement treatment groups, there will be a significant relationship between fashion involvement and persuasiveness to buy.	Pearson Partially accepted
H8. For respondents in different advertisement treatment groups, there will be a significant relationship between fashion involvement and likelihood to buy.	Pearson Partially accepted
H9. For respondents in different advertisement treatment groups, there will be a significant relationship between advertisement involvement and persuasiveness to buy.	Pearson Accepted
H10. For respondents in different advertisement treatment groups, there will be a significant relationship between advertisement involvement and likelihood to buy.	Pearson Accepted

Note. MR = Multiple Regression

Discussion of Results

This study examined the use of images in advertisements for a fashion apparel product that might be seen as controversial because "…audience involvement with the persuasive communication….is seen as a key moderating influence on the nature of the process through which a message exerts its persuasive effects on the audience" (Areni & Lutz, 1988, p. 197). However, the importance of images as a means of persuasion in advertisements, with a few exceptions, has been viewed as secondary to copy (text) in advertisements (Messaris, 1997). Even though images play an important part in the communication of messages for fashion apparel, research to develop an understanding of how images influence consumers has been limited.

Involvement plays a key role in fashion clothing that can be seen not only in the defining role of fashion clothing in society, but also in the effort that some consumers put into keeping up with the seasonal trends in clothing (O'Cass, 2001). Consequently, hypotheses were developed to test the proposition that viewers' level of advertisement and fashion involvement would be moderated by level of advertisement treatment for a fashion product considered controversial: (1) copy and image, (2) copy only, and (3) image only.

Influential research in the study of involvement such as the body of work by Petty and Cacioppo (1986) who developed the Elaboration Likelihood Model (ELM) which has become one of the most influential models that explains persuasion and information processing by individuals, has contributed to the idea that copy plays a key role in the elaboration of messages of those who are more involved with a product or advertisement. Their research on persuasion stemmed from their studies in social psychology. An interest in persuasion by Petty and Cacioppo (1984) led these researchers to focus their attention on changes in attitude and thought

in response to argument quantity changes. According to Petty and Cacioppo (1986), attitude change in highly involved individuals takes place when advertising arguments tap into their central route to persuasion, while less involved individuals use a peripheral route.

However, many have found it difficult to replicate the findings of the ELM (Cole et al., 1990; Costley, 1988). Especially when testing images in advertisements for apparel, the latest published research that has embraced the ELM has acknowledged problems with the methodology "because pictorial elements interact with each other in holistic processing, it is difficult to isolate the effect of central information from other effects of pictorial cues" (Oh & Jasper, 2006, p.30). Other critics like Scott (1994a) and Crimmins (1997) believe there are problems with the methodology because subjects have been generally divided into high and low involvement groups by making them believe that the advertisements were immediately relevant. Beyond laboratory settings, they argue, advertisers do not really have that ability to manipulate subjects' level of involvement, so it is wrong to assume this. In addition, they also argue that designating the level of involvement also goes against the understanding that involvement is measured on a continuum.

As a state that ranges from low to high along a personal motivational continuum, involvement was measured in this study using validated scales. The Revised Personal Involvement Inventory (RPII) developed by McQuarrie and Munson (1987) was used to measure advertisement involvement. The Fashion Involvement Index (FII) developed by Tigert et al. (1976) was used to measure apparel product involvement. Both scales had dimensions that provided additional information to test an overall state of involvement, as recommended by Laurent & Kapferer (1993). This is an important contribution of this study as previous researchers have acknowledged that "...involvement data must be interpreted cautiously, since

they were gathered in a "role playing" situation, they suggest the possibility that the involvement manipulations used in ELM research have not tapped the extremes of the involvement continuum" (Areni & Lutz, 1988, p.201).

Adult, affluent women living in eight major metropolitan areas of the United States were sampled for this study. Securing responses from actual consumers was an important contribution of this study to involvement research and the role images in advertisements for fashion apparel. Gender has been found to play an important role in involvement with fashion apparel because women tend to develop more personal and social connections than men (O'Cass, 2004). Convenience student samples widely used in previous involvement studies have been found to limit both the results and the extension of the conclusions in involvement research (Oh & Jasper, 2006).

Across all levels of advertisement treatment, respondents in this study were moderately fashion involved. However, exploring their responses on the dimensions of the FII provided additional information of their level on fashion innovativeness showed that these respondents did not share their ideas on fashion with others, did not show an interest on learning about new trends and fashions, did not have a lot of knowledge of what is fashionable, and did not have an opinion on the latest trends. Exploration and assessment of respondents' fashion involvement was an important pretest in establishing an overall base assessment of product involvement. Fashion involvement has been accepted as a valid measurement of clothing involvement (Kim et al., 2002). It is also an accepted measure of the state of involvement that affects both information seeking and purchasing behaviors (O'Cass, 2001). An assessment of the level of fashion involvement was also important because highly involved fashion consumers are fashion leaders who not only adopt new fashion trends early, but also exhibit behaviors that are desirable for the

continued success of products in the marketplace like influencing the behavior of others (Belleau et al., 2001).

As previously noted, the use of text in advertisements has been considered more persuasive than copy (Messaris, 1997; Petty & Cacioppo, 1986). Yet in this study, variation in the advertisement treatment produced no moderating effects on the relationship between involvement with the advertisement and fashion involvement. Minard et al. (1991) used marginally significant results to say that images contributed to higher elaboration of messages, therefore the findings in the current study are further evidence that copy is no more influential than images. Oh and Jasper (2006) found evidence to support elaboration of copy for a utilitarian apparel product and no evidence to support the use of copy for an expressive apparel product. However, Oh and Jasper acknowledged that their experimental design might have contributed to their findings because they used the same picture of the models wearing the apparel product in all their advertisement treatments. Childers and Houston (1984) argued that images may help in the processing of advertising information, but the findings in the current study show no evidence to suggest that there would be higher levels of advertisement processing as a result of the use of an image.

Age was the only demographic characteristic found to moderate the relationship between fashion involvement and involvement with the advertisement as measured on the pleasure dimension of the RPII. While Flynn and Goldsmith (1993) found that identifying consumers by their level of involvement was a better predictor of fashion involvement than using demographic information, O'Cass (2001) suggested that age is an important antecedent of fashion involvement. On this point, he found that age and gender had significant effects on pleasure. This supports the findings in this study. Ethnic differences did not play a moderating role in this

study. Stith and Goldsmith (1989) found that ethnic differences explained less than 2% of fashion involvement. However, Goldsmith et al. (1987) also suggest that affluent African-Americans are more fashion oriented than whites. Most respondents in the current study were white, not of Hispanic origin, and the homogeneous nature of the respondents may have influenced the results. Regardless of race, women have been found to be more fashion involved than men and therefore spend more time and money on clothing (Goldsmith et al., 1987).

Respondents had mixed feelings or agreed that it is socially acceptable to wear American alligator leather apparel. Thus, respondents in this study may not have perceived the use of American alligator leather apparel in the advertisement treatment as controversial. Respondents did not have a clear understanding of the correct endangerment status of American alligator. When considering the selection of clothing, social acceptance was less important to respondents. Findings were consistent with Xu (2000). The respondents in her national survey were also less knowledgeable of the correct endangerment status of the American alligator. Her respondents tended to have extreme views, while responses in this study were more normally distributed. However, like Xu's findings respondents in this study strongly agreed that they would not buy apparel made from skins of endangered animals.

While respondents reported noticing clothing featured in select media, most did not seem to make a special effort to purchase clothing that they had seen advertised or worn by celebrities. Respondents paid attention to clothing when it was featured in movies and television in addition to more traditional media such as magazines, but gave less attention to up-scale catalogs as a source of information. Only a few respondents read fashion and lifestyles magazines. More often, respondents tended to read weekly news magazines such as People, Newsweek, and Time. The assessment of media use was important because media has been found to be an important

source of apparel information of fashion consumers (Thomas et al., 1991). Consumers also often seek information from both media and non-media sources to make apparel purchase decisions (Thomas et al., 1991).

The was no significant relationship between respondents' fashion involvement and their perception of the persuasiveness of the advertisement treatment viewed among those who saw the copy and image advertisement nor among those who saw the image only advertisement. Those who saw the copy only advertisement were the only respondents who had a significant relationship between fashion involvement and advertisement persuasiveness. Findings differ from those found in the pilot study by Santaella (2001) where a college student sample was used and students were more fashion involved than current respondents. In the pilot study, the copy only group did not have a significant relationship with fashion involvement. These differences in findings may be further evidence that age does play an important part in moderating fashion involvement. In the current study, significant relationships were found between fashion involvement and likelihood to buy the advertised item at all levels of advertisement treatment. These findings do not differ from those of the pilot study (Santaella, 2001).

Highly significant relationships were found for all respondents in the different treatment groups between their advertisement involvement and their assessment of the persuasiveness of the advertisement viewed and their advertisement involvement likelihood to buy the advertised product. This is an interesting finding considering that respondents were not in a laboratory setting and were not made to believe that the advertisements would have relevant consequences to their immediate personal lifestyles as in methodology used in ELM have done (Haugtvedt et al., 1988; Petty & Cacioppo, 1984; Petty et al., 1983) Because they were not cued as in ELM studies and the advertisement treatments did not show any personal endorsements, findings in

this study seem to contradict Petty et al. (1983) who suggested that at higher levels of advertisement involvement, there is less interest in visual cues. Highly significant positive and increasing relationships were found between respondents' advertisement involvement and all advertisement involvement treatments which included copy and image, copy only, and image only in this research.

CHAPTER 5

SUMMARY, LIMITATIONS, CONCLUSIONS, IMPLICATIONS TO INDUSTRY AND RECOMMENDATIONS FOR FUTURE RESEARCH

Summary

Images in fashion apparel advertisements often play a key role in promoting the latest trends and guide the consumer about apparel that will be available in the marketplace. Because images have been treated as peripheral cues in previous research, the primary goal of this study was to determine if differences in variations in advertisement content would influence viewers' motivation to process information, also known as advertisement involvement. Understanding the dimensions of involvement can lead to better design of the consumer message. For this reason, the focus of this research was to determine if advertisement content moderated the relationship between involvement with an advertisement and involvement with the product interpreted as fashion involvement. Three variations of the same advertisement treatment for a high fashion product that might be perceived as controversial were developed: (1) copy and image, (2) copy only, and (3) image only.

Because involvement is viewed as the motivation to process information, it has been considered an important catalyst of the message in the consumer communications process. Thus, involvement was used as the theoretical framework in this study of the roles of image and copy in fashion advertisements. Involvement was measured along a continuum from low to high. Involvement with the advertisement treatment was measured using the Revised Personal Involvement Inventory (RPII) developed by McQuarrie and Munson (1987). Involvement with the apparel product was measured using the Fashion Involvement Index (FII) developed by Tigert et al. (1976). Both scales were subdivided into dimensions that were useful in examining an overall state of involvement as recommended by Laurent and Kapferer (1985).

Frequencies and ANOVA were computed to describe the responses. A number of box-plots, scatterplots, and histograms also provided a means to visualize the data. Hypotheses were tested using multiple regression (MR) and Pearson correlation analyses.

A mail survey was conducted of a sample of 1,200 women 21 years of age and older, with intended household incomes of $75,000 or higher, living in eight major metropolitan areas of the United States. The response rate was 23%. In general, the respondents were highly educated; over 30 years of age; white, not of Hispanic origin; married; full-time employed professionals; and affluent. Respondents were representative of the sample frame. The response rate in this study was within 10 to 50 percent and was considered "common for a mail survey in the social sciences" (Neuman, 2000, p.268).

Respondents had mixed feelings or agreed that it was socially acceptable to wear American alligator leather apparel, did not have a clear understanding of the correct endangerment status of American alligator, and strongly agreed that they would not buy apparel made from skins of endangered animals. While respondents reported noticing clothing featured in select media, most did not seem to make a special effort to purchase clothing they had seen advertised or worn by celebrities. Movies and television generated more fashion interest than other media. Across all levels of advertisement treatment, respondents were moderately fashion involved. However, analysis of the dimensions of the FII showed that, in general, respondents did not share their ideas on fashion with others, did not show an interest in learning about new trends and fashions, did not have a lot of knowledge of what is fashionable, and did not have an opinion on the latest trends. These results were similar to those of Xu (2000) who used a similar sampling frame to draw her respondents, but her respondents were not the same set of respondents from this study.

Variation in advertisement treatment produced no moderating effects on involvement with the advertisement when tested using the RPII or any of its internal dimensions of the RPII: (1) Original Personal Involvement Inventory (OPII), (2) importance, (3) pleasure, and (4) risk. Age was the only demographic characteristic found to moderate the relationship between fashion involvement and involvement with the advertisement as measured on the pleasure dimension of the RPII. Additional post-hoc analyses revealed that the 41-60 age group was significantly different from the 61-over age group. The 41-60 age group experienced a higher advertisement involvement as measured on the pleasure dimension for every unit change in their fashion involvement as measured by the FII. Given this findings, this age group seems to be more receptive to advertising messages that convey pleasurable experiences. Given that respondents in this group also have attained higher levels of affluence, education, and professional status, these individuals may seek information that fulfills higher level needs of self-satisfaction.

There were significant relationships between fashion involvement and ownership of leather products and between level of advertisement involvement and ownership of leather products. Results also showed significant relationships between fashion involvement and media exposure and between advertisement involvement and media exposure. Overall, the respondents felt that the advertisements were persuasive. They also expressed that they would be more likely to buy the product as a result of exposure to the advertisement. These findings were highly significant for all groups regardless of the advertisement treatment.

Limitations

Because of the sample frame selected, results of this study may not be generalizable to the population at large. Therefore, findings may not be representative of minorities, singles, males, people living in households with incomes below $75,000, or in non-metropolitan areas.

The study was conducted just as the Internet was becoming a source of information, and a site for e-commerce. As a result, fewer consumers or apparel retailers and manufacturers were using this medium than today.

This study only tested a printed advertisement. Consequently, results may not be generalizable to other media.

Conclusions

Fashion involvement is a deeply personal state that is of interest to apparel research scientists because in a consumer society it drives the motivation to stay current with the latest trends in clothing. Fashion involved consumers are willing to spend time searching, shopping, and even influencing the purchasing behaviors of others. As a result, the success of many apparel products relies on the enthusiasm of consumers for the products. Because fashion involvement is an intimate consumer characteristic that can range on a continuum from low to high, it is important to those who manufacture and promote fashionable apparel. The ever changing fashion industry relies on understanding how much individuals pay attention to the information available in the marketplace as they make their purchases of apparel.

While apparel researchers understand the importance of advertising as evidenced by research studies that have found that individuals pay attention to the media to see what is available in the marketplace, it was also important to understand if differing advertisement content influences the individual's motivation to process such information. Some researchers suggest that when dealing with fashion, images are an appropriate means to inform consumers about apparel products because these products have aesthetic qualities that can be better communicated using images. The preponderance of images in advertisements for fashion apparel might also suggest that these advertisements are effective. However, when these apparel products

are made from materials that may be controversial, the kind of message to use is less clear. In addition, apparel researchers have acknowledged an interest by consumers in learning and understanding more about the materials of apparel products they buy. As a result, using copy to provide information like fiber content may be easier than developing a complex image.

A review of the research literature revealed a wide range of philosophical views that help explain the role of images and text in advertisements. Some continue to favor the use of text versus images to get the message across to consumers. However, marginal results and the lack of evidence in the research literature are causes for concern, especially because the view that images are peripheral cues to the message continues to dominate the literature. However, no evidence was found in this study to sustain the view that level of advertisement involvement on fashion involvement is moderated by level of advertisement treatment: (1) copy and image, (2) copy only, and (3) image only.

Despite the lack of evidence to support the view that level of advertisement treatment can moderate the relationship between fashion involvement as a function of apparel product involvement and advertisement involvement, the use of the Revised Personal Involvement Inventory (RPII) developed by McQuarrie and Munson (1987) was a useful measure of overall advertisement involvement because it provided information on both the state of involvement and four important internal dimensions: (1) Original Personal Involvement Inventory (OPII), (2) importance, (3) pleasure, and (4) risk. The use of the Fashion Involvement Index (FII) developed by Tigert et al. (1976) was a useful measure of overall fashion involvement because it provided an overall measure of the state of enduring involvement with fashion apparel. Thus, unlike previous studies that have manipulated involvement, this study measured involvement on a continuum from low to high as it has been conceptualized. Because moderation was tested using

multiple regression (MR) analysis, there was more accuracy in the measurements as there was no loss of information from collapsing responses on the continuous dependent variable, advertisement involvement as measured by the RPII, and the independent variable fashion involvement as measured by the FII.

Age was the only demographic characteristic found to moderate the relationship of advertisement involvement on fashion involvement. Age moderated this relationship unlike findings in those studies that used student samples or mall intercept. The age range of respondents in this study was broad. Differences in age have been shown to affect involvement with apparel because fit changes as women age, thus affecting the ability of some women to derive value from their purchase. Because the product used in the advertisement was a luxurious item, age may have influenced the psychological or social need of some respondents to reflect their affluence. Apparel research suggests that individuals use fashion as a signaling device in consumer societies because materialism has replaced the caste system as a way to structure social life.

Fashion involvement helped to explain much of the involvement with the advertisement. Fashion involvement was also significantly related to level of ownership of leather products and media use. Therefore, it is an important predictor of apparel product involvement and it should be considered when studying advertisements for fashion apparel. While fashion involvement in this study only explained less than 10% of involvement with the advertisement, this finding is still important as previous research has identified that fashion leaders and innovators are often those who are more fashion involved tend to keep up with trends, purchase new styles, and influence others (Ring, 1977; Tigert et al., 1976, 1980). These innovators are also more self-confident and tend to buy more luxurious products (Summers et al., 2006).

Implications to Industry

Apparel products made with luxurious exotic leather offer a potentially strong market for the domestic exotic leather industry. This study was part of a larger research project designed profile consumers of American alligator leather apparel products and to develop promotional strategies for these products.

Results from this study indicate that consumers notice advertisements. While images tend to dominate fashion advertisements, consumers did not differ in their involvement with the advertisement regardless of advertisement treatment: (1) copy and image, (2) copy only, or (3) image only. Fashion involved consumers tended to follow the media to learn about clothing. Despite findings that showed that fashion involvement explained only a small percentage of involvement with the advertisement, all respondents agreed that they would be more likely to purchase the apparel products featured as a result of their exposure to the advertisement. Even though most respondents were moderately fashion involved, they did notice clothing in certain media more than others. For this reason, the fashion industry could focus their promotional efforts on product placement in movies and television and less on dressing celebrities.

Recommendations for Future Research

This study should be replicated using the RPII and the FII to determine respondents' opinions of multiple sets of advertisement treatments such that: the assortment of apparel products tested differs; the age of the models promoting the apparel changes; there are no people featured in the advertisements; other controversial apparel products are used in the advertisements such as furs or other exotics; non-controversial and ecological apparel products are featured in the advertisements; illustrations or sketches are used instead of photographs of the apparel.

An Internet based study may facilitate the replication of this study as it could allow respondents to complete the questionnaires in a timely manner and researchers to follow up with the respondents. Access to an apparel retail company's actual customer database could allow for both collecting information on consumers' perception of the test advertisements and the comparison of such information with past purchasing behavior. This may provide a more comprehensive perspective. Partnering with a media company could also allow for more realistic embedding of the advertisements such that the questionnaire could be placed as part of regular content and subscribers could be contacted to evaluate their reactions to the advertisement messages.

Because different media affect how images and copy are displayed and the groups that use such media, results found in this study might vary. For this reason, information about exposure to other media not included in this study should also be analyzed. Consequently, advertisement treatments also need to be studied in newspapers, outdoor, infomercials, direct mail, direct shopping, trailers either in theaters or in media such as DVDs, Internet blogs, or through cell phones and other portable wireless devices.

For a given business, it is estimated that 80% of sales will come from 20% of their consumers. Based on the results this study, knowing where one's consumers are on the fashion involvement continuum may help retailers, designers, and manufacturers to better communicate their messages to these consumers. Especially when it comes to luxury goods that may be controversial, information needs to be provided so that potential consumers know what the benefits of the fashion apparel products are. However, no evidence was found in this study to suggest that an advertisement that uses copy only was any more involving than one using copy and image or image only in order to communicate this message.

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APPENDIX A

LETTER OF AUTHORIZATION TO USE PHOTOGRAPH

MAR-06-00 06:57 PM CHRISTINA PERRIN 212 268 5171 P.02
MAR-03-2000 10:29 SCH OF HUMAN ECOLOGY 225 388 4571 P.03

LOUISIANA STATE UNIVERSITY
School of Human Ecology

Christina Perrin
214 W. 39th Street #705
New York, NY

Dear Christina,

This is to request your permission to use the two pictures of the alligator hunter from the Spring 2000 collection book for educational purposes. These pictures will only be used as examples of how alligator leather can be used in fashion apparel as part of the ongoing research project being conducted by faculty at Louisiana State University. They will not be published for profit.

Please sign below if approval granted.

Date: 3/6/00

We are now working with people in the emu and ostrich industry. If we are able to acquire an inventory of skins from them, would you be interested in designing another garment from these skins? I'm in touch with Suzanne and can let her know if we have available skins.

Kindest regards,

Yvonne Marquette
Instructor,
Textile Science, Apparel Design and Merchandising

Figure A-1. **Letter of authorization to use picture in the advertisement**

APPENDIX B

ADVERTISEMENT TREATMENTS

Figure B-1. **Group 1 Treatment: Copy and Image advertisement**

Figure B-2. **Group 2 Treatment: Copy only advertisement**

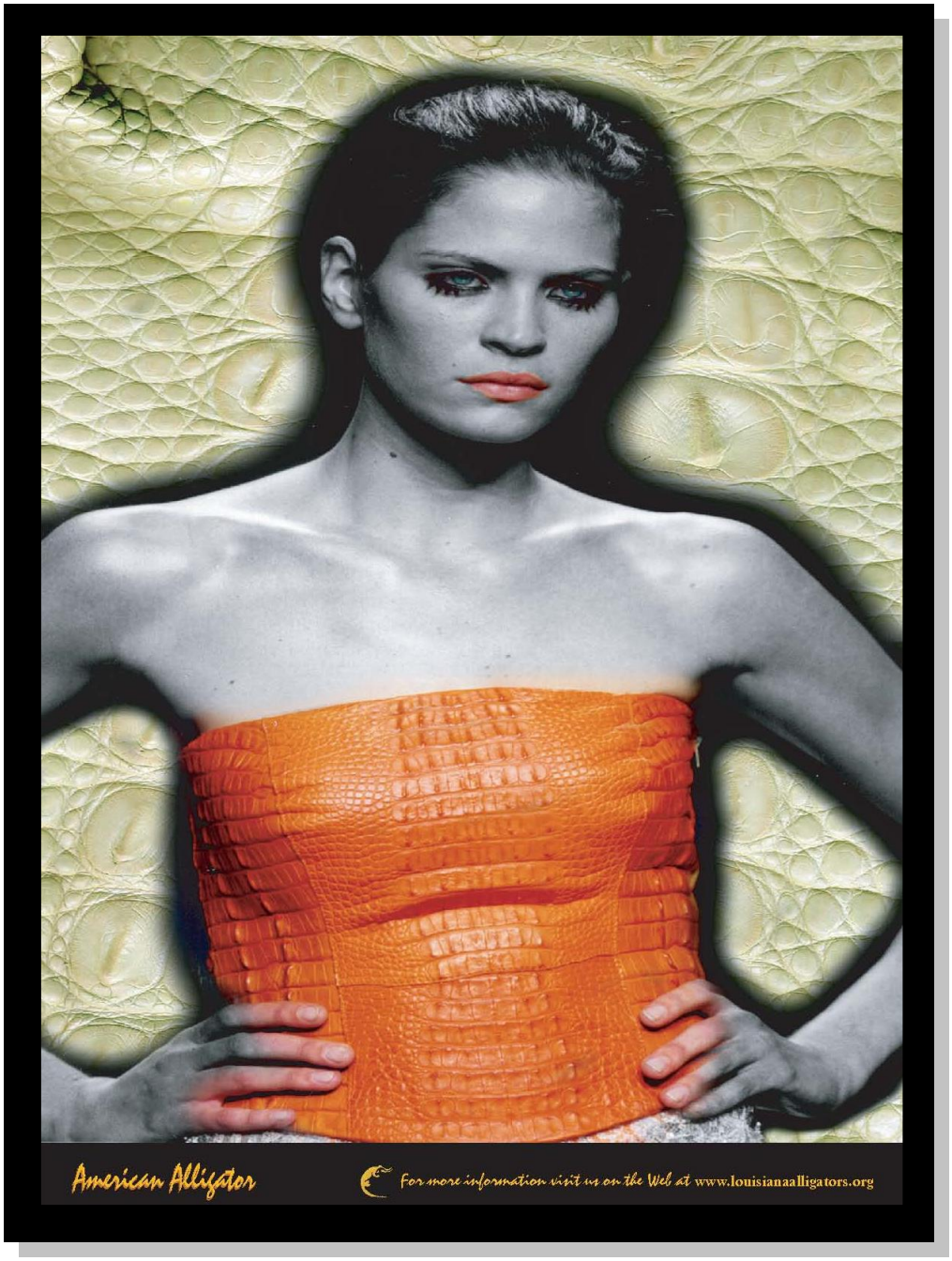


Figure B-3. **Group 3 Treatment: Image only advertisement**

APPENDIX C

SURVEY

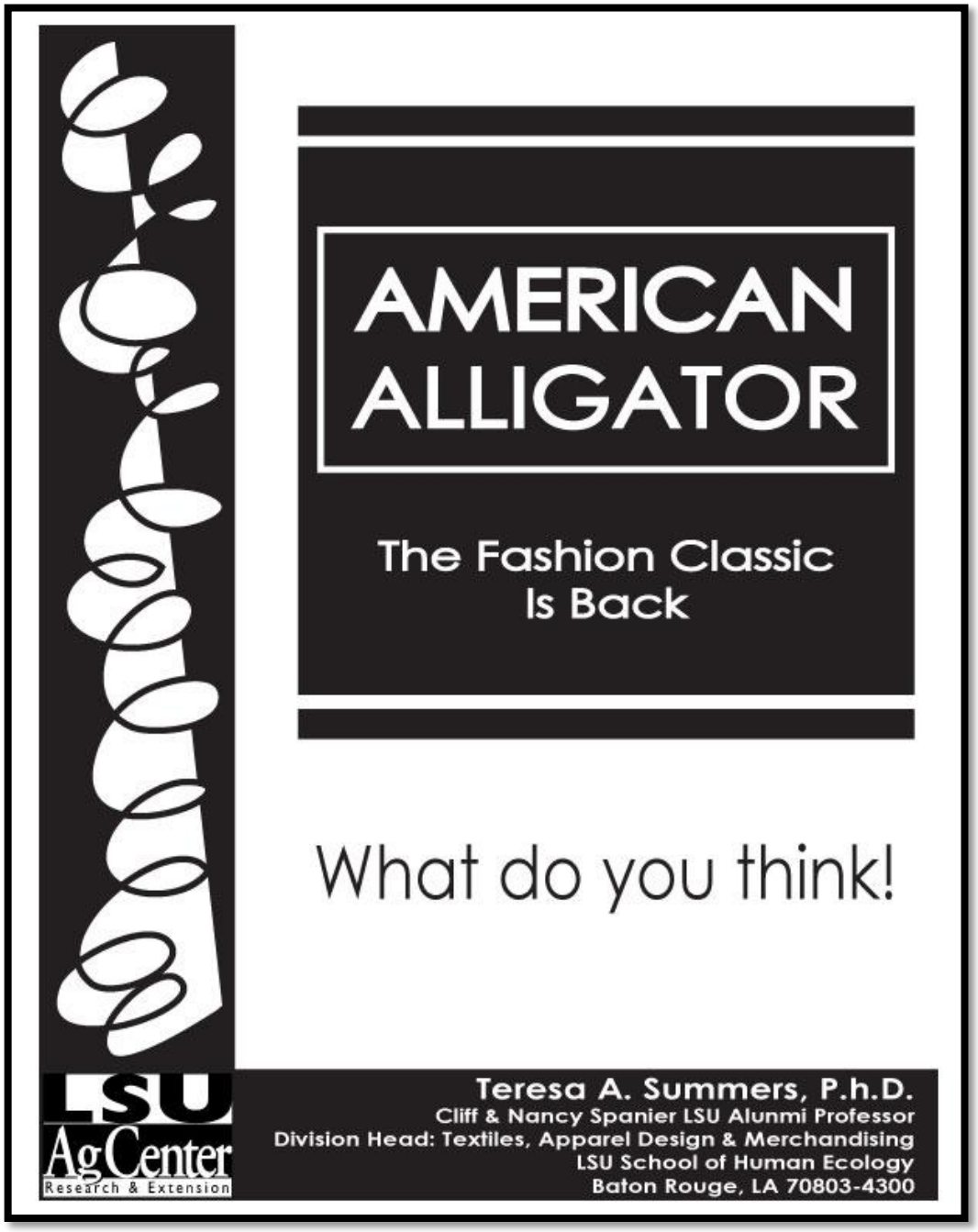


Figure C-1. **Survey Cover for Treatment Group 1: Copy and Image**

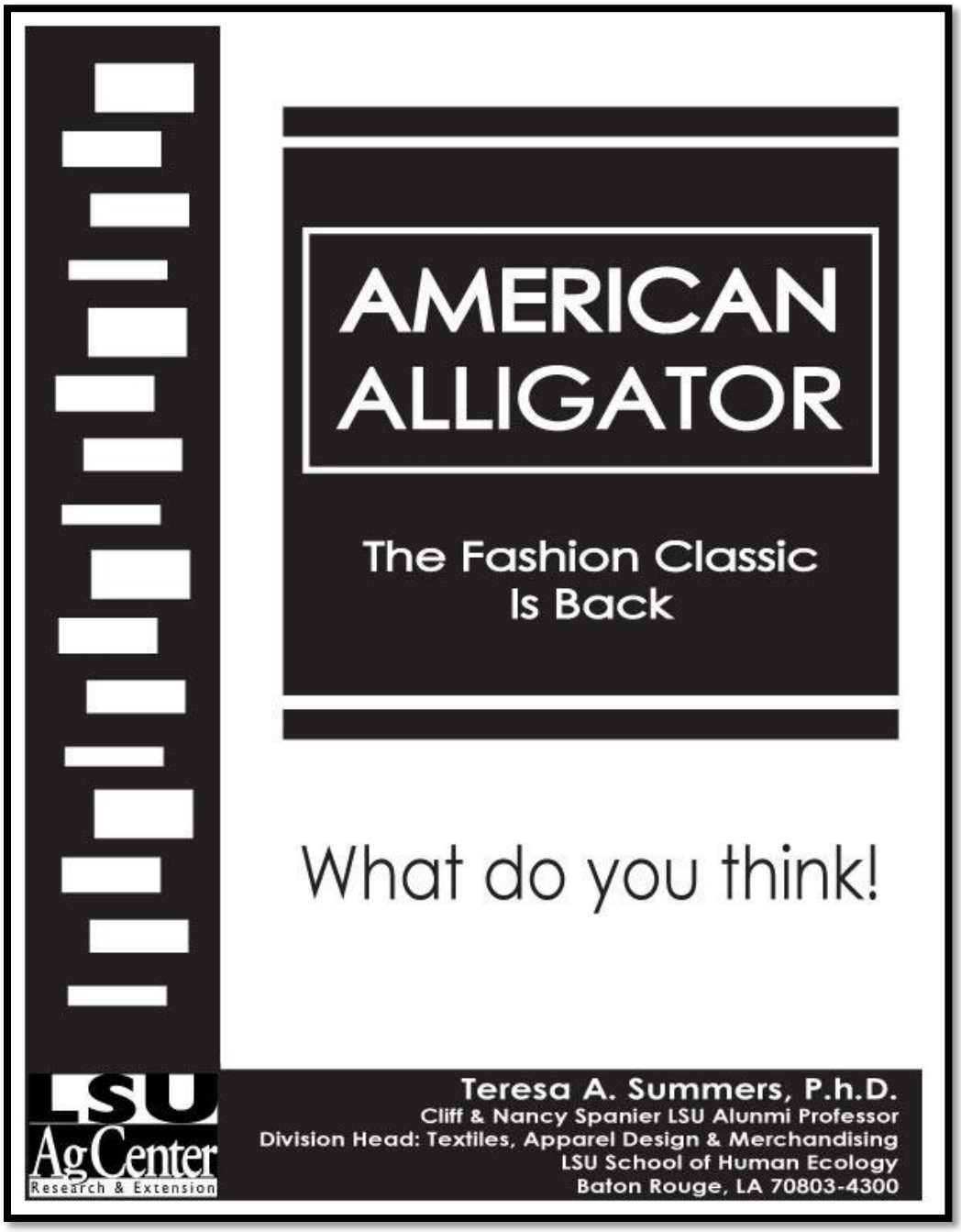


Figure C-2. **Survey Cover for Treatment Group 2: Copy only**

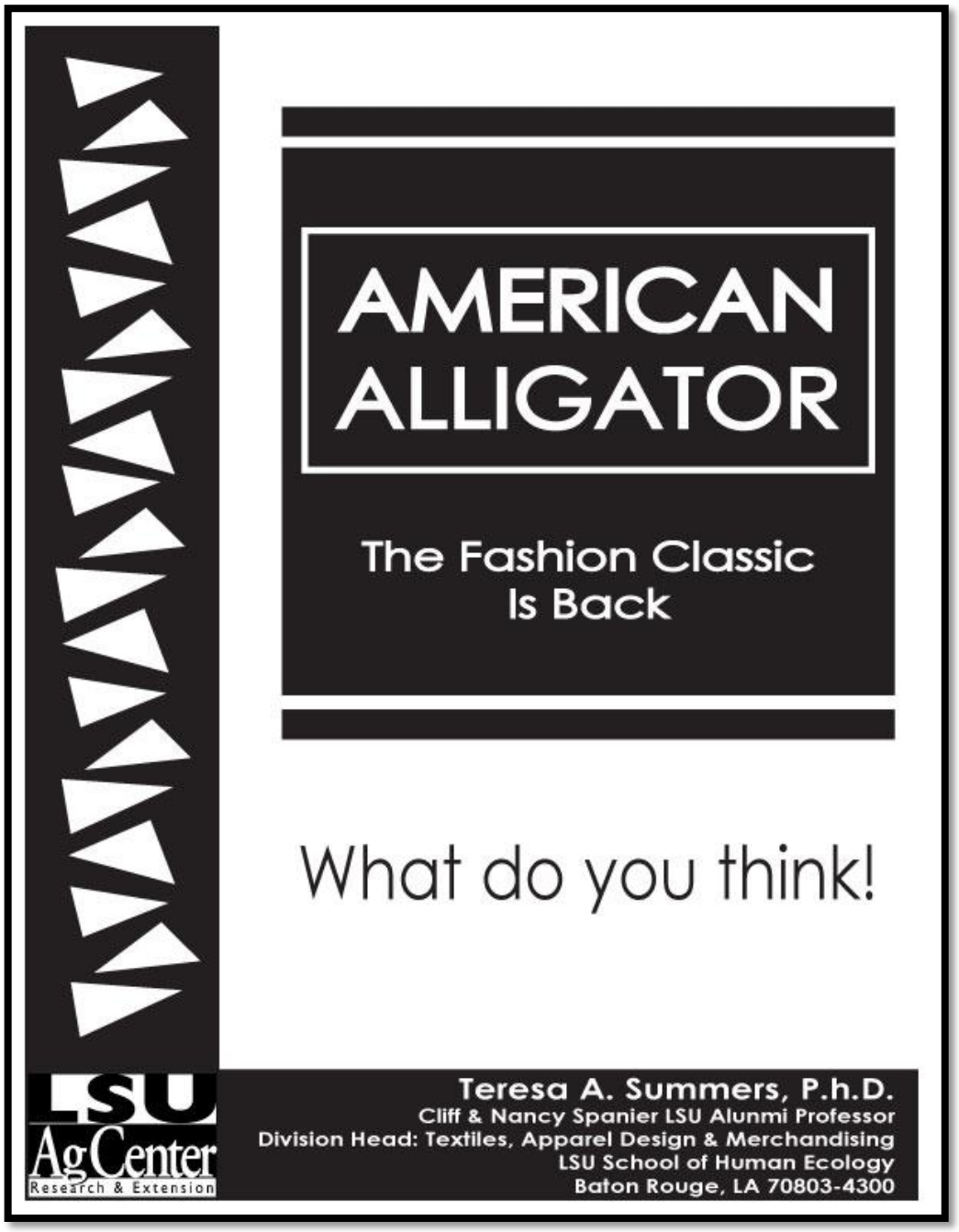


Figure C-3. **Survey Cover for Treatment Group 3: Image only**

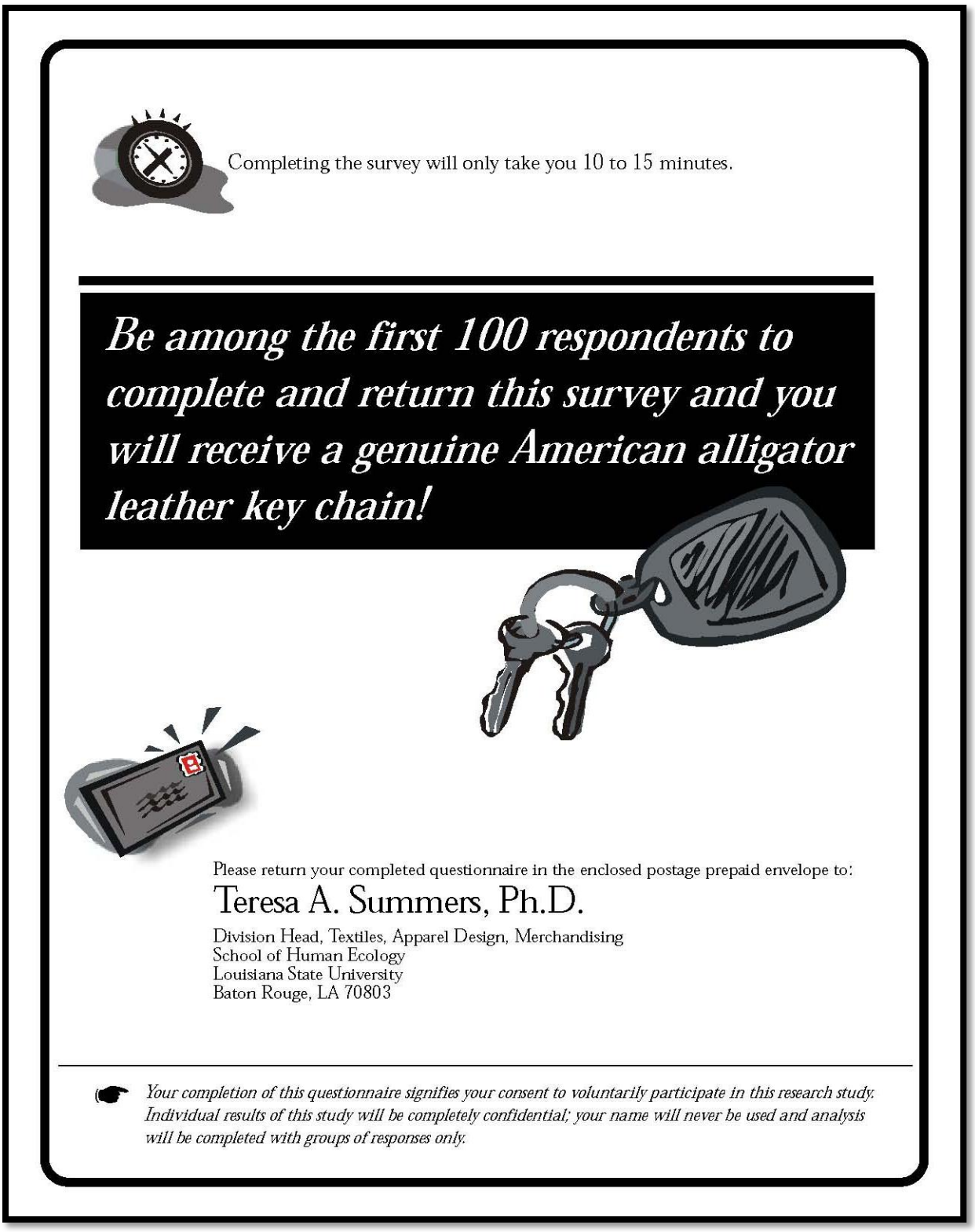


Figure C-4. **Survey inside cover for all advertisement treatment groups**

Please circle your response:

◆ In general, would you say you buy women's clothing fashions ***earlier*** in the season, ***about the same***, or ***later*** in the season than most other women?

a. Earlier in the season than most other women.
b. About the same time as most other women.
c. Later in the season than most other women.

◆ Would you say you give ***very little information***, ***an average amount of information***, or ***a great deal of information*** about new women's clothing fashions to your friends?

a. I give very little information to my friends.
b. I give an average amount of information to my friends.
c. I give a great deal of information to my friends.

◆ In general, would you say you are ***less interested***, ***about as interested***, or ***more interested*** in women's clothing fashions than most other women?

a. Less interested than most other women.
b. About as interested as most other women.
c. More interested than most other women.

◆ Compared with most other women, are you ***less likely***, ***about as likely***, or ***more likely*** to be asked for advice about new women's clothing fashions?

a. Less likely to be asked than most other women.
b. About as likely to be asked as mot other women.
c. More likely to be asked than most other women.

◆ Which one of the statements below best describes ***your reaction to changing fashions in women's clothes***? (Even though there may be no statement listed which exactly describes how you feel, make the best choice you can from the answers listed).

a. I read the fashion news regularly and try to keep my wardrobe up to date with the fashion trends.
b. I keep up to date on all the fashion changes although I don't always attempt to dress according to those changes.
c. I check to see what is currently fashionable only when I need to buy some new clothes.
d. I don't pay attention to fashion trends unless a major change takes place.
e. I am not at all interested in fashion trends.

Please circle your response

	Extremely Disagree	Quite Disagree	Slightly Disagree	Mixed Feeling	Slightly Agree	Quite Agree	Extremely Agree
◆ Wearing alligator leather apparel is socially acceptable	1	2	3	4	5	6	7
◆ The American alligator is no longer on the endangered species list	1	2	3	4	5	6	7
◆ Social acceptance is important for me when I select apparel	1	2	3	4	5	6	7
◆ I will not buy apparel made of skins from endangered animals	1	2	3	4	5	6	7

Figure C-5. **Survey page 1**

Please read these directions.

On the next two pages, you will be asked to judge an advertisement. To record your opinion to this advertisement you will need to follow these instructions.

The purpose of this study is to measure a person's interest in advertisements for apparel made with American Alligator leather. To do this, we need you to judge an advertisement for apparel made with American Alligator leather using a scale. Here is how you are to judge the advertisement.

First look at the enclosed advertisement, if you feel that the advertisement is ***very closely related*** to one end of the scale, you should place your check mark as follows:

Unimportant [X] : [ ] : [ ] : [ ] : [ ] : [ ] : [ ] Important

or

Unimportant [ ] : [ ] : [ ] : [ ] : [ ] : [ ] : [X] Important

If you feel that the advertisement is ***quite closely related*** to one or the other end of the scale (but not extremely), you should place your check mark as follows:

Appealing [ ] : [X] : [ ] : [ ] : [ ] : [ ] : [ ] Unappealing

or

Appealing [ ] : [ ] : [ ] : [ ] : [ ] : [X] : [ ] Unappealing

If you feel that the advertisement seems ***only slightly related*** to one or the other end of the scale (but not really neutral), you should place your check mark as follows:

Uninterested [ ] : [ ] : [X] : [ ] : [ ] : [ ] : [ ] Interested

or

Uninterested [ ] : [ ] : [ ] : [ ] : [X] : [ ] : [ ] Interested

IMPORTANT:

1. Be sure that you check every scale; do not omit any.

2. Never put more than one check mark on a single scale.

Make each item a separate and independent judgment. Work at fairly high speed through this questionnaire. Do not worry or puzzle over individual items. It is your first impressions, the immediate feelings about the items, that we want. On the other hand, please do not be careless because we want your true impression.

Figure C-6. **Survey page 2**

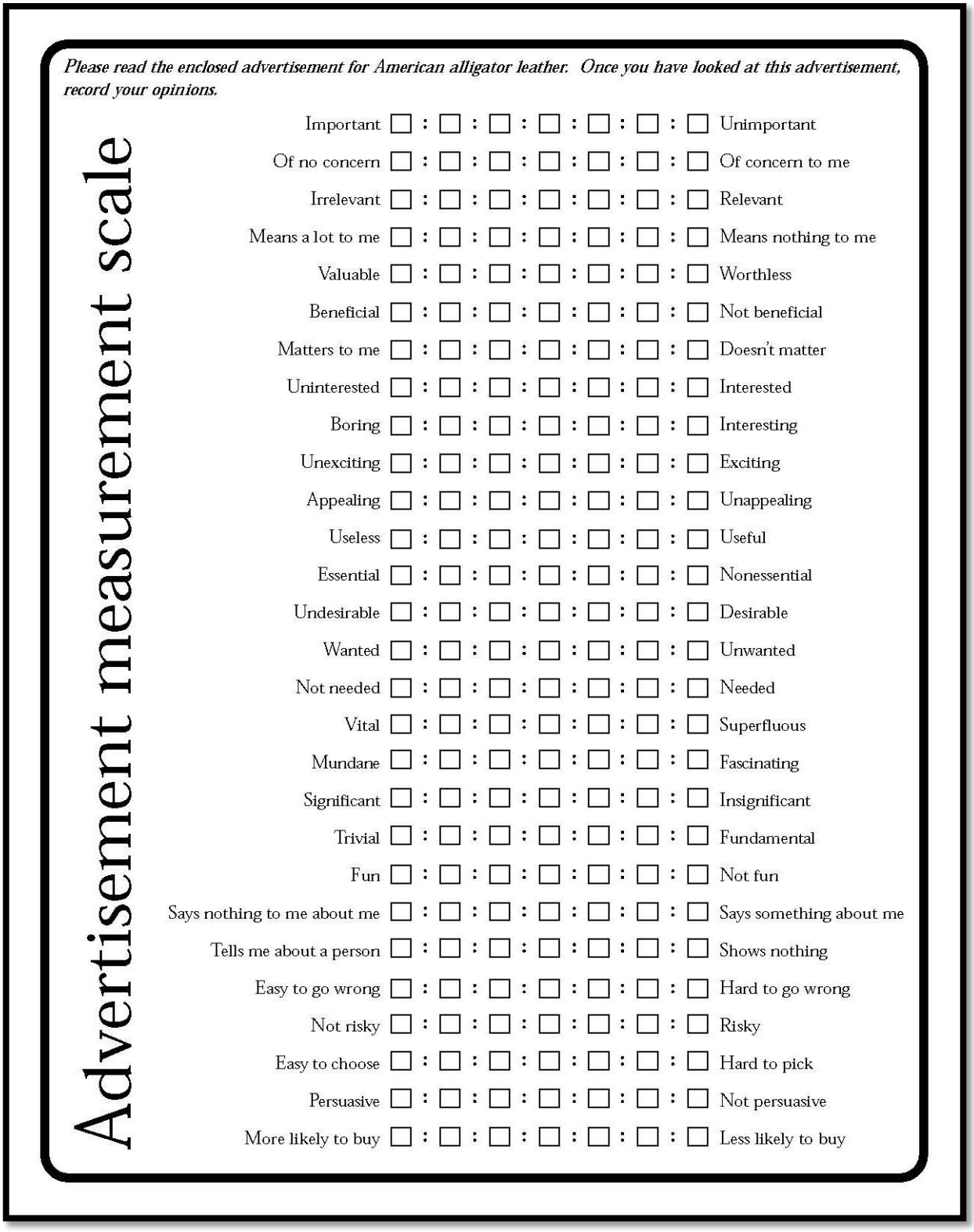
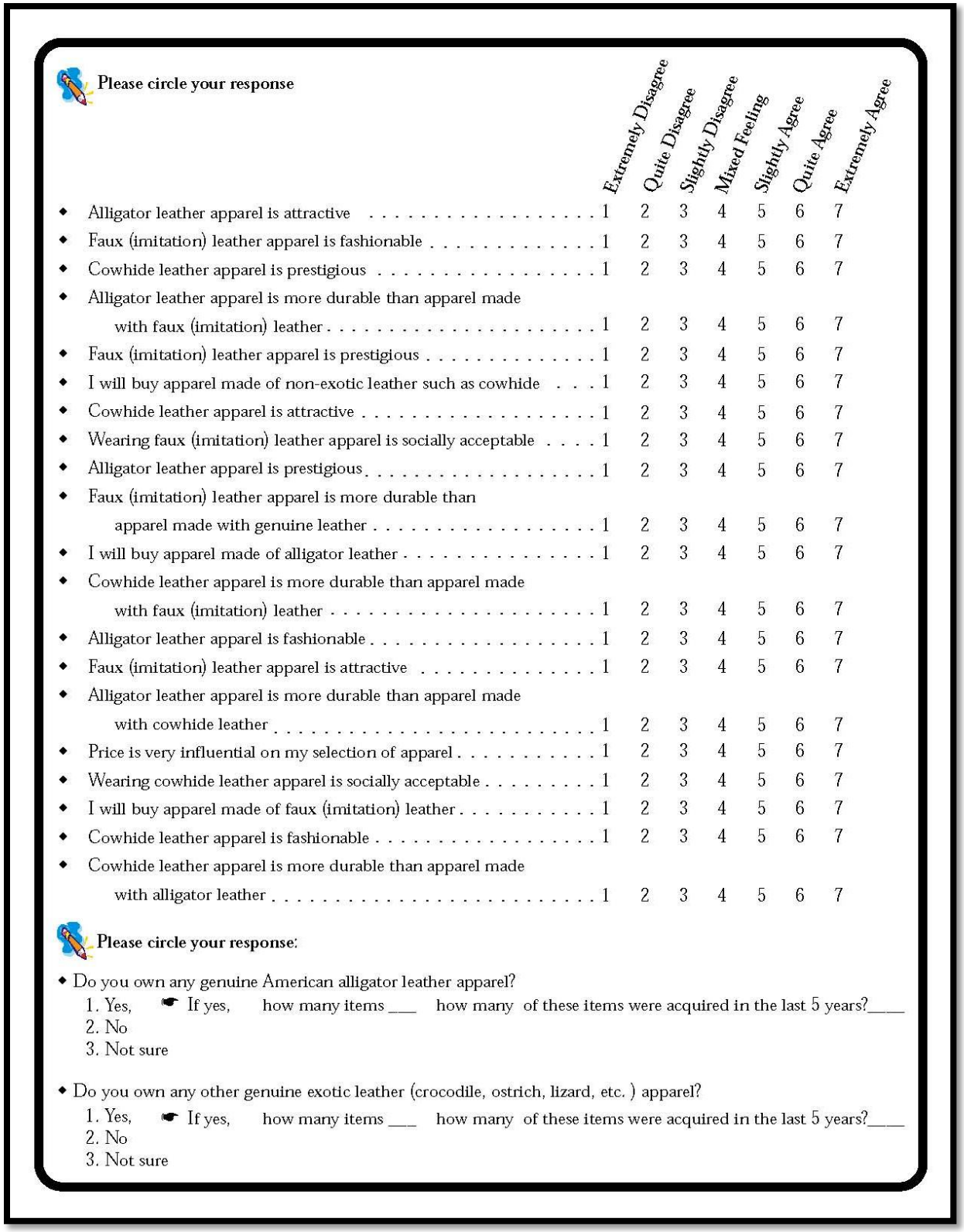


Figure C-7. **Survey page 3**



Please circle your response

	Extremely Disagree	Quite Disagree	Slightly Disagree	Mixed Feeling	Slightly Agree	Quite Agree	Extremely Agree
◆ Alligator leather apparel is attractive	1	2	3	4	5	6	7
◆ Faux (imitation) leather apparel is fashionable	1	2	3	4	5	6	7
◆ Cowhide leather apparel is prestigious	1	2	3	4	5	6	7
◆ Alligator leather apparel is more durable than apparel made with faux (imitation) leather	1	2	3	4	5	6	7
◆ Faux (imitation) leather apparel is prestigious	1	2	3	4	5	6	7
◆ I will buy apparel made of non-exotic leather such as cowhide	1	2	3	4	5	6	7
◆ Cowhide leather apparel is attractive	1	2	3	4	5	6	7
◆ Wearing faux (imitation) leather apparel is socially acceptable	1	2	3	4	5	6	7
◆ Alligator leather apparel is prestigious	1	2	3	4	5	6	7
◆ Faux (imitation) leather apparel is more durable than apparel made with genuine leather	1	2	3	4	5	6	7
◆ I will buy apparel made of alligator leather	1	2	3	4	5	6	7
◆ Cowhide leather apparel is more durable than apparel made with faux (imitation) leather	1	2	3	4	5	6	7
◆ Alligator leather apparel is fashionable	1	2	3	4	5	6	7
◆ Faux (imitation) leather apparel is attractive	1	2	3	4	5	6	7
◆ Alligator leather apparel is more durable than apparel made with cowhide leather	1	2	3	4	5	6	7
◆ Price is very influential on my selection of apparel	1	2	3	4	5	6	7
◆ Wearing cowhide leather apparel is socially acceptable	1	2	3	4	5	6	7
◆ I will buy apparel made of faux (imitation) leather	1	2	3	4	5	6	7
◆ Cowhide leather apparel is fashionable	1	2	3	4	5	6	7
◆ Cowhide leather apparel is more durable than apparel made with alligator leather	1	2	3	4	5	6	7

Please circle your response:

◆ Do you own any genuine American alligator leather apparel?

1. Yes, ☛ If yes, how many items ___ how many of these items were acquired in the last 5 years?___
2. No
3. Not sure

◆ Do you own any other genuine exotic leather (crocodile, ostrich, lizard, etc.) apparel?

1. Yes, ☛ If yes, how many items ___ how many of these items were acquired in the last 5 years?___
2. No
3. Not sure

Figure C-8. **Survey page 4**

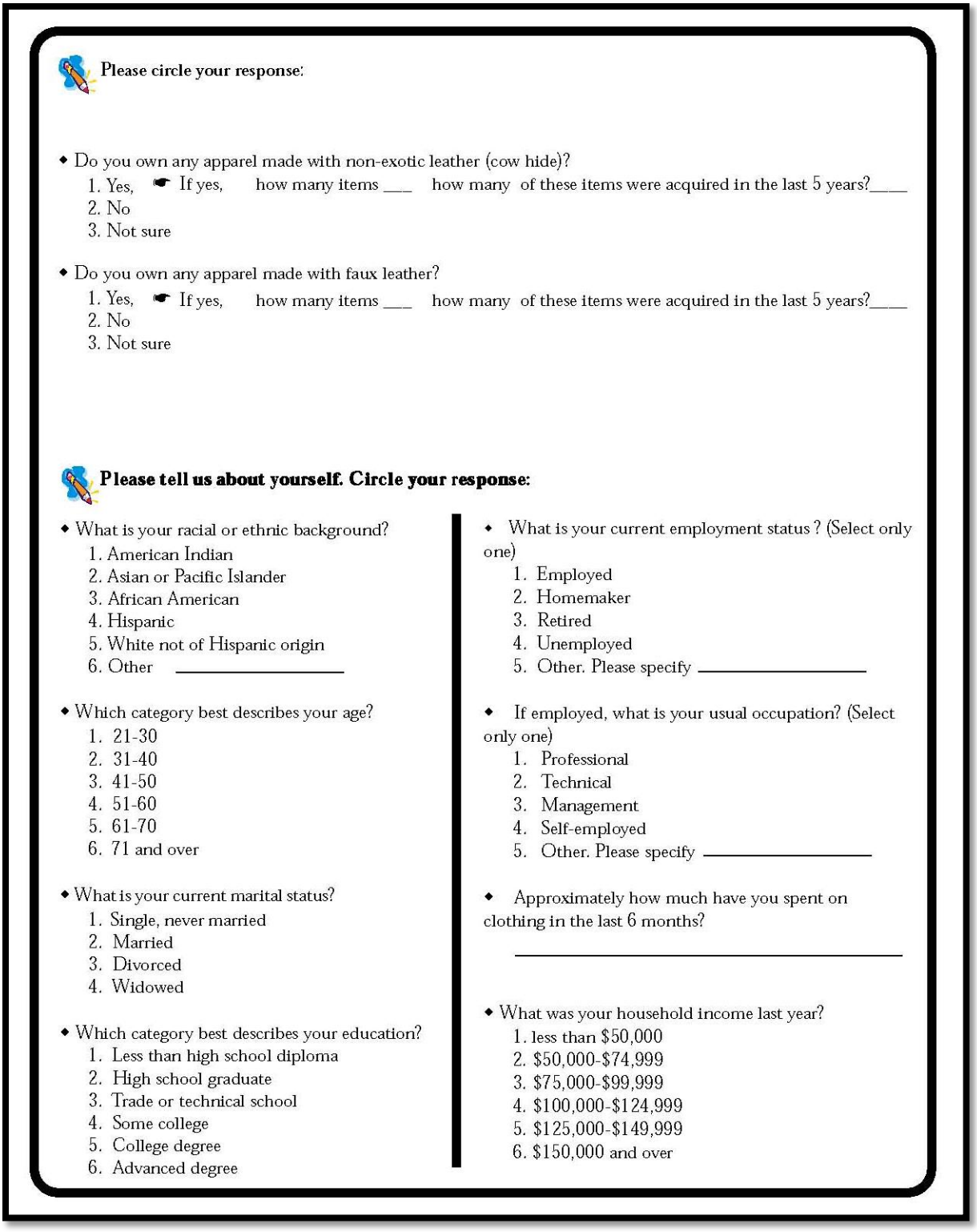
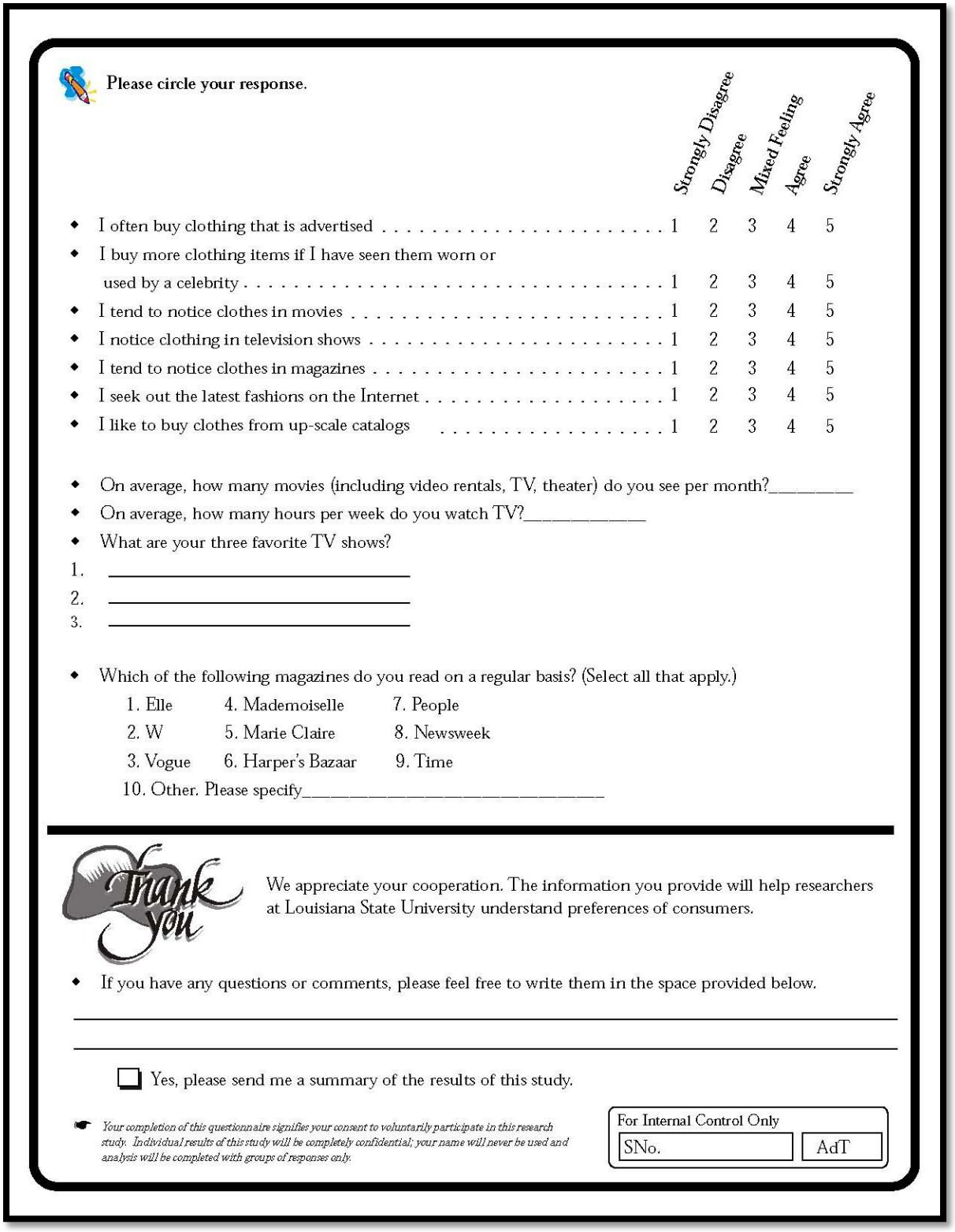


Figure C-9. **Survey page 5**



Please circle your response.

	Strongly Disagree	Disagree	Mixed Feeling	Agree	Strongly Agree
I often buy clothing that is advertised	1	2	3	4	5
I buy more clothing items if I have seen them worn or used by a celebrity	1	2	3	4	5
I tend to notice clothes in movies	1	2	3	4	5
I notice clothing in television shows	1	2	3	4	5
I tend to notice clothes in magazines	1	2	3	4	5
I seek out the latest fashions on the Internet	1	2	3	4	5
I like to buy clothes from up-scale catalogs	1	2	3	4	5

- On average, how many movies (including video rentals, TV, theater) do you see per month?_____
- On average, how many hours per week do you watch TV?_____
- What are your three favorite TV shows?

1. _____
2. _____
3. _____

- Which of the following magazines do you read on a regular basis? (Select all that apply.)

1. Elle
2. W
3. Vogue
4. Mademoiselle
5. Marie Claire
6. Harper's Bazaar
7. People
8. Newsweek
9. Time
10. Other. Please specify_____

Thank You

We appreciate your cooperation. The information you provide will help researchers at Louisiana State University understand preferences of consumers.

- If you have any questions or comments, please feel free to write them in the space provided below.

_____

_____

☐ Yes, please send me a summary of the results of this study.

Your completion of this questionnaire signifies your consent to voluntarily participate in this research study. Individual results of this study will be completely confidential; your name will never be used and analysis will be completed with groups of responses only.

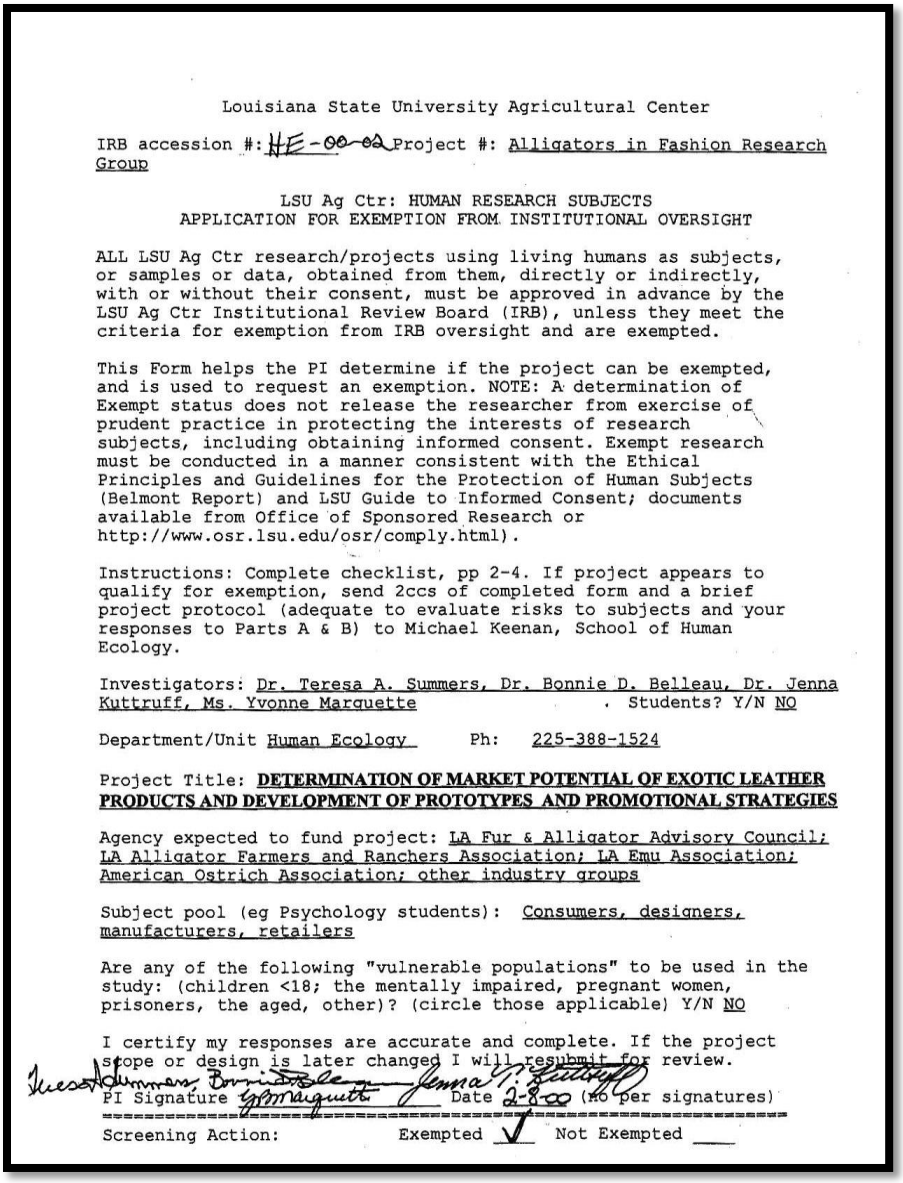
For Internal Control Only

SNo. | AdT

Figure C-10. **Survey page 6**

APPENDIX D

LSU: HUMAN RESEARCH SUBJECTS APPLICATION FOR EXEMPTION FROM INSTITUTIONAL OVERSIGHT (IRB APPROVAL FORM)



Louisiana State University Agricultural Center

IRB accession #: HE-00-02 Project #: Alligators in Fashion Research Group

LSU Ag Ctr: HUMAN RESEARCH SUBJECTS
APPLICATION FOR EXEMPTION FROM INSTITUTIONAL OVERSIGHT

ALL LSU Ag Ctr research/projects using living humans as subjects, or samples or data, obtained from them, directly or indirectly, with or without their consent, must be approved in advance by the LSU Ag Ctr Institutional Review Board (IRB), unless they meet the criteria for exemption from IRB oversight and are exempted.

This Form helps the PI determine if the project can be exempted, and is used to request an exemption. NOTE: A determination of Exempt status does not release the researcher from exercise of prudent practice in protecting the interests of research subjects, including obtaining informed consent. Exempt research must be conducted in a manner consistent with the Ethical Principles and Guidelines for the Protection of Human Subjects (Belmont Report) and LSU Guide to Informed Consent; documents available from Office of Sponsored Research or http://www.osr.lsu.edu/osr/comply.html).

Instructions: Complete checklist, pp 2-4. If project appears to qualify for exemption, send 2ccs of completed form and a brief project protocol (adequate to evaluate risks to subjects and your responses to Parts A & B) to Michael Keenan, School of Human Ecology.

Investigators: Dr. Teresa A. Summers, Dr. Bonnie D. Belleau, Dr. Jenna Kuttruff, Ms. Yvonne Marquette . Students? Y/N NO

Department/Unit Human Ecology Ph: 225-388-1524

Project Title: **DETERMINATION OF MARKET POTENTIAL OF EXOTIC LEATHER PRODUCTS AND DEVELOPMENT OF PROTOTYPES AND PROMOTIONAL STRATEGIES**

Agency expected to fund project: LA Fur & Alligator Advisory Council; LA Alligator Farmers and Ranchers Association; LA Emu Association; American Ostrich Association; other industry groups

Subject pool (eg Psychology students): Consumers, designers, manufacturers, retailers

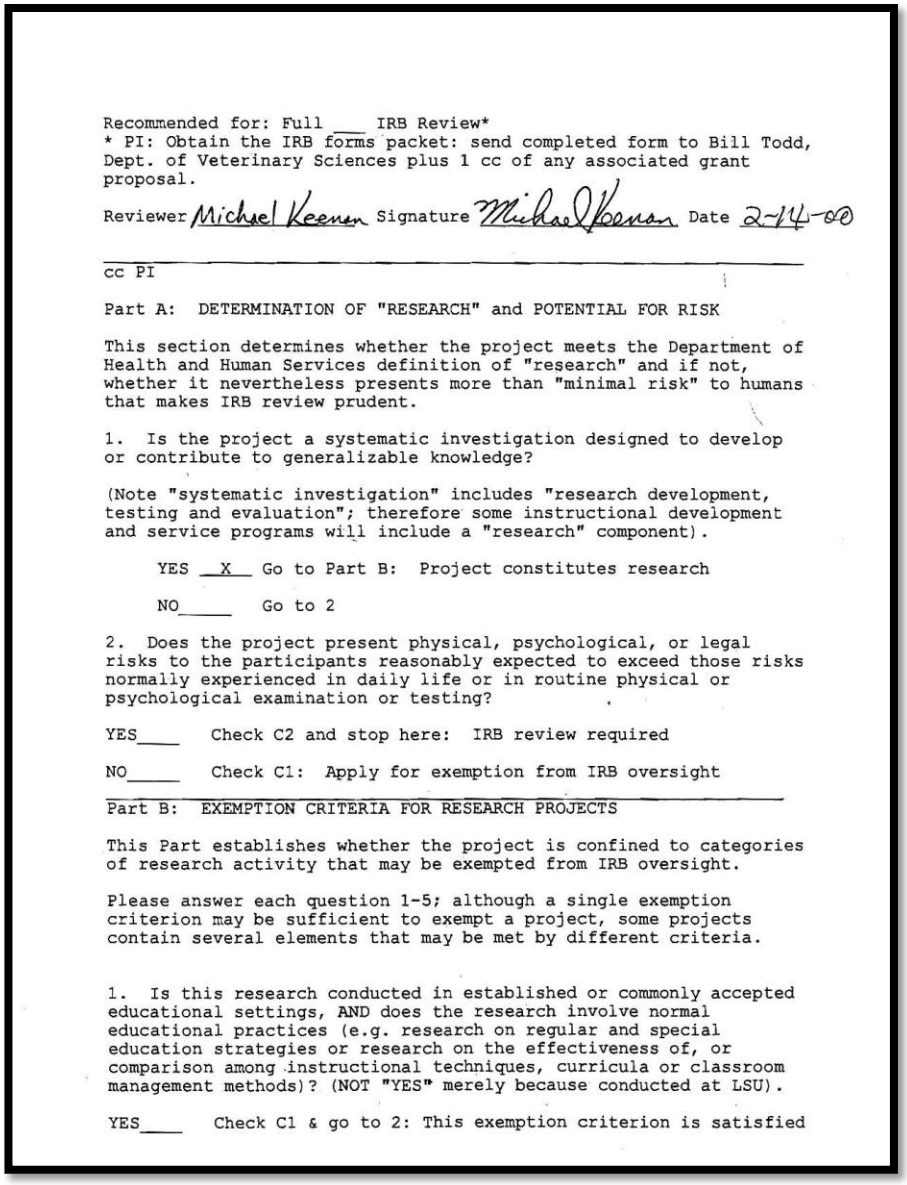
Are any of the following "vulnerable populations" to be used in the study: (children <18; the mentally impaired, pregnant women, prisoners, the aged, other)? (circle those applicable) Y/N NO

I certify my responses are accurate and complete. If the project scope or design is later changed I will resubmit for review.

PI Signature Teresa Summers, Bonnie Belleau, Jenna T. Kuttruff, Yvonne Marquette Date 2-8-00 (No per signatures)

Screening Action: Exempted √ Not Exempted ___

Figure D-1. **Page 1 of the IRB approval form**



Recommended for: Full ___ IRB Review*
* PI: Obtain the IRB forms packet: send completed form to Bill Todd, Dept. of Veterinary Sciences plus 1 cc of any associated grant proposal.

Reviewer Michael Keenan Signature Michael Keenan Date 2-14-00

cc PI

Part A: DETERMINATION OF "RESEARCH" and POTENTIAL FOR RISK

This section determines whether the project meets the Department of Health and Human Services definition of "research" and if not, whether it nevertheless presents more than "minimal risk" to humans that makes IRB review prudent.

1. Is the project a systematic investigation designed to develop or contribute to generalizable knowledge?

(Note "systematic investigation" includes "research development, testing and evaluation"; therefore some instructional development and service programs will include a "research" component).

YES __X__ Go to Part B: Project constitutes research

NO_____ Go to 2

2. Does the project present physical, psychological, or legal risks to the participants reasonably expected to exceed those risks normally experienced in daily life or in routine physical or psychological examination or testing?

YES____ Check C2 and stop here: IRB review required

NO_____ Check C1: Apply for exemption from IRB oversight

Part B: EXEMPTION CRITERIA FOR RESEARCH PROJECTS

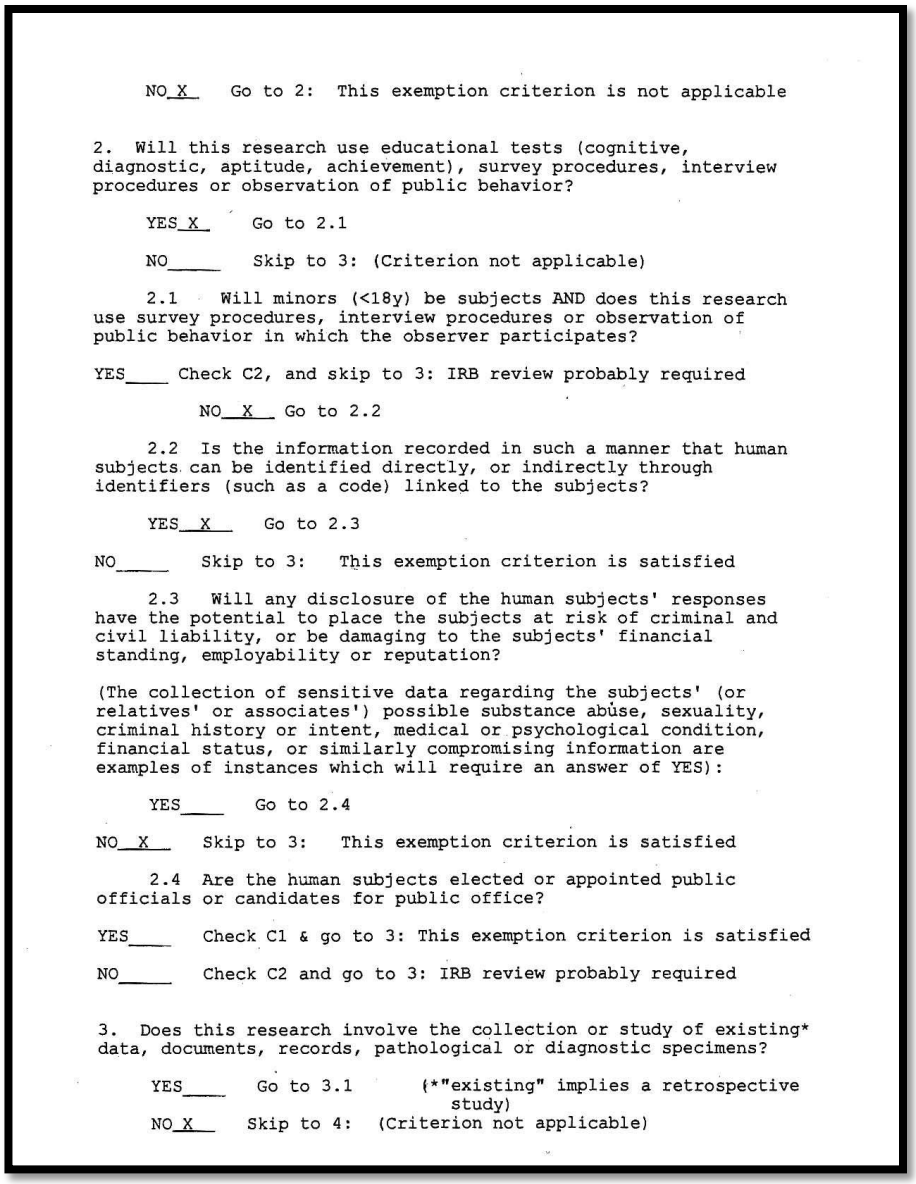
This Part establishes whether the project is confined to categories of research activity that may be exempted from IRB oversight.

Please answer each question 1-5; although a single exemption criterion may be sufficient to exempt a project, some projects contain several elements that may be met by different criteria.

1. Is this research conducted in established or commonly accepted educational settings, AND does the research involve normal educational practices (e.g. research on regular and special education strategies or research on the effectiveness of, or comparison among instructional techniques, curricula or classroom management methods)? (NOT "YES" merely because conducted at LSU).

YES____ Check C1 & go to 2: This exemption criterion is satisfied

Figure D-2. **Page 2 of the IRB approval form**



NO X Go to 2: This exemption criterion is not applicable

2. Will this research use educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior?

YES X Go to 2.1

NO_____ Skip to 3: (Criterion not applicable)

2.1 Will minors (<18y) be subjects AND does this research use survey procedures, interview procedures or observation of public behavior in which the observer participates?

YES____ Check C2, and skip to 3: IRB review probably required

NO X Go to 2.2

2.2 Is the information recorded in such a manner that human subjects can be identified directly, or indirectly through identifiers (such as a code) linked to the subjects?

YES X Go to 2.3

NO_____ Skip to 3: This exemption criterion is satisfied

2.3 Will any disclosure of the human subjects' responses have the potential to place the subjects at risk of criminal and civil liability, or be damaging to the subjects' financial standing, employability or reputation?

(The collection of sensitive data regarding the subjects' (or relatives' or associates') possible substance abuse, sexuality, criminal history or intent, medical or psychological condition, financial status, or similarly compromising information are examples of instances which will require an answer of YES):

YES____ Go to 2.4

NO X Skip to 3: This exemption criterion is satisfied

2.4 Are the human subjects elected or appointed public officials or candidates for public office?

YES____ Check C1 & go to 3: This exemption criterion is satisfied

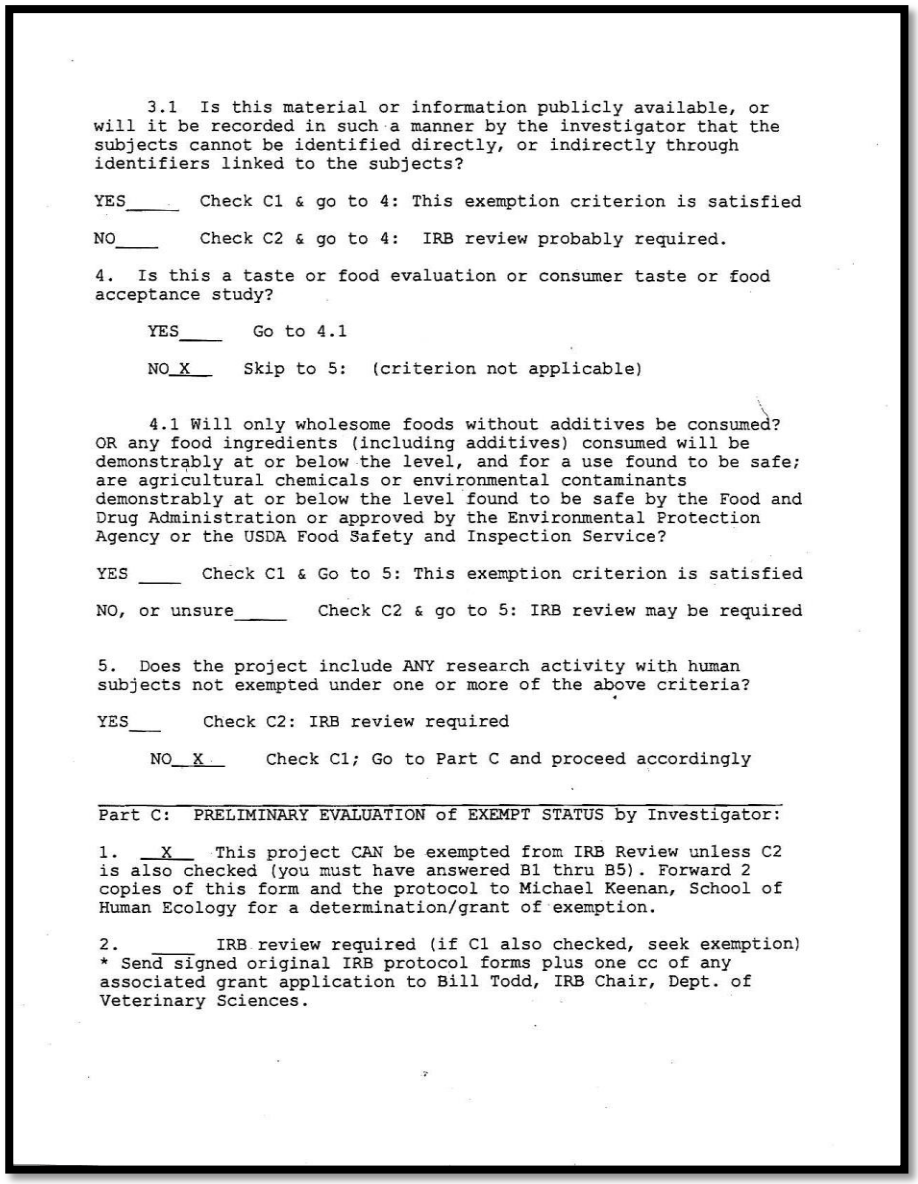
NO_____ Check C2 and go to 3: IRB review probably required

3. Does this research involve the collection or study of existing* data, documents, records, pathological or diagnostic specimens?

YES____ Go to 3.1 (*"existing" implies a retrospective study)

NO X Skip to 4: (Criterion not applicable)

Figure D-3**. Page 3 of the IRB approval form**



3.1 Is this material or information publicly available, or will it be recorded in such a manner by the investigator that the subjects cannot be identified directly, or indirectly through identifiers linked to the subjects?

YES_____ Check C1 & go to 4: This exemption criterion is satisfied

NO____ Check C2 & go to 4: IRB review probably required.

4. Is this a taste or food evaluation or consumer taste or food acceptance study?

YES____ Go to 4.1

NO_X__ Skip to 5: (criterion not applicable)

4.1 Will only wholesome foods without additives be consumed? OR any food ingredients (including additives) consumed will be demonstrably at or below the level, and for a use found to be safe; are agricultural chemicals or environmental contaminants demonstrably at or below the level found to be safe by the Food and Drug Administration or approved by the Environmental Protection Agency or the USDA Food Safety and Inspection Service?

YES ____ Check C1 & Go to 5: This exemption criterion is satisfied

NO, or unsure_____ Check C2 & go to 5: IRB review may be required

5. Does the project include ANY research activity with human subjects not exempted under one or more of the above criteria?

YES___ Check C2: IRB review required

NO__X__ Check C1; Go to Part C and proceed accordingly

Part C: PRELIMINARY EVALUATION of EXEMPT STATUS by Investigator:

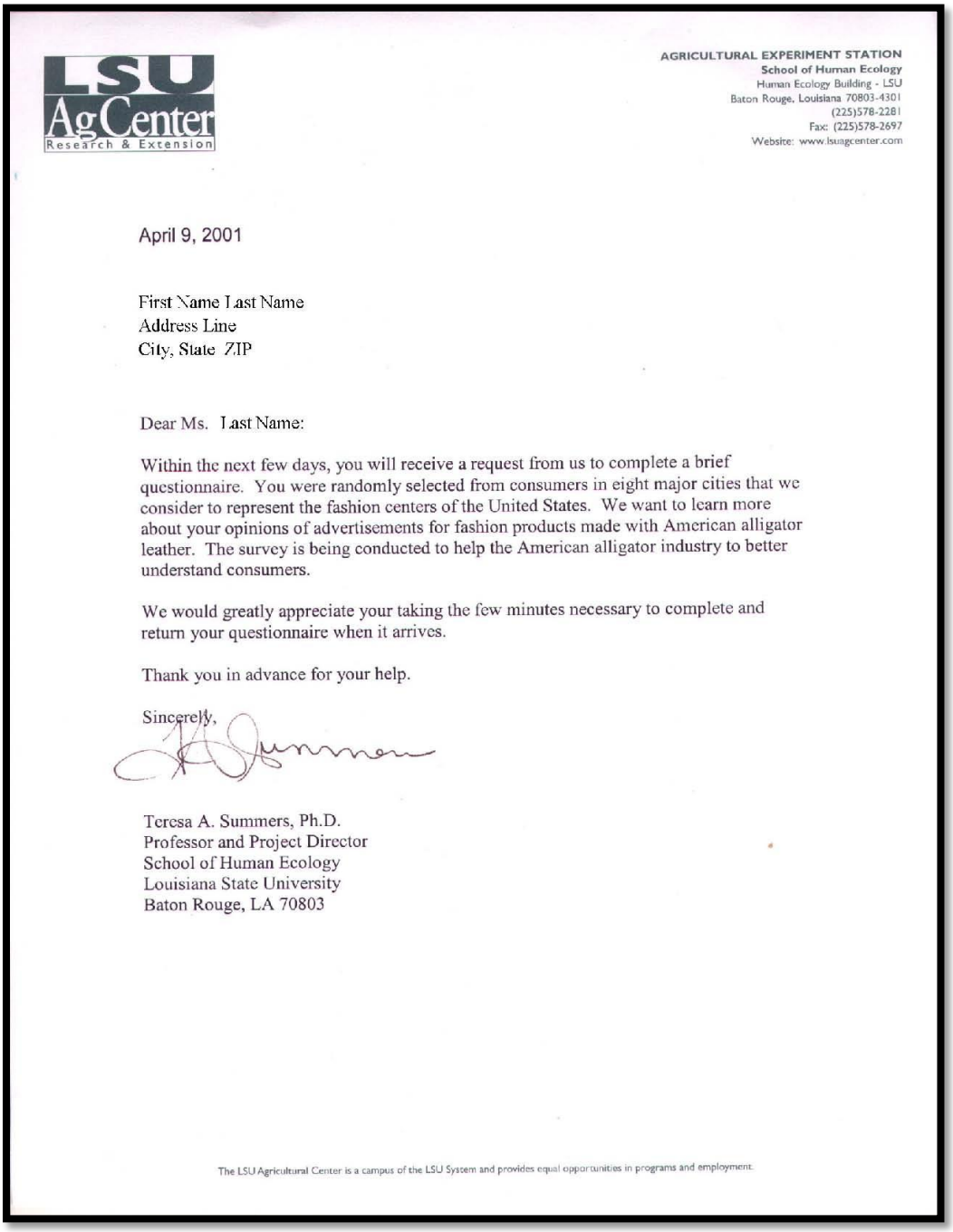
1. __X__ This project CAN be exempted from IRB Review unless C2 is also checked (you must have answered B1 thru B5). Forward 2 copies of this form and the protocol to Michael Keenan, School of Human Ecology for a determination/grant of exemption.

2. ____ IRB review required (if C1 also checked, seek exemption)
* Send signed original IRB protocol forms plus one cc of any associated grant application to Bill Todd, IRB Chair, Dept. of Veterinary Sciences.

Figure D-4. **Page 4 of the IRB approval form**

APPENDIX E

CORRESPONDENCE



LSU AgCenter
Research & Extension

AGRICULTURAL EXPERIMENT STATION
School of Human Ecology
Human Ecology Building - LSU
Baton Rouge, Louisiana 70803-4301
(225)578-2281
Fax: (225)578-2697
Website: www.lsuagcenter.com

April 9, 2001

First Name Last Name
Address Line
City, State ZIP

Dear Ms. Last Name:

Within the next few days, you will receive a request from us to complete a brief questionnaire. You were randomly selected from consumers in eight major cities that we consider to represent the fashion centers of the United States. We want to learn more about your opinions of advertisements for fashion products made with American alligator leather. The survey is being conducted to help the American alligator industry to better understand consumers.

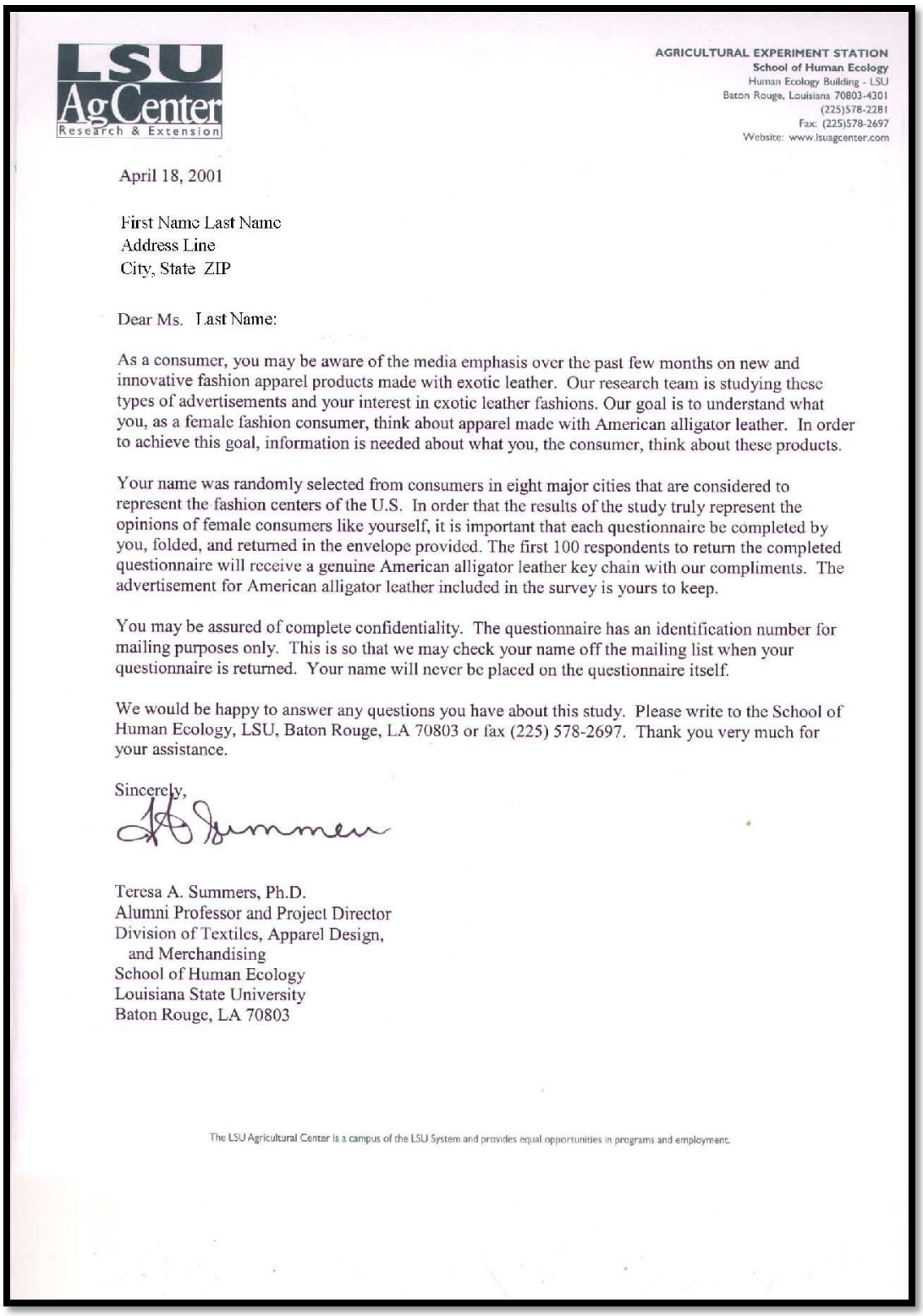
We would greatly appreciate your taking the few minutes necessary to complete and return your questionnaire when it arrives.

Thank you in advance for your help.

Sincerely,

Teresa A. Summers, Ph.D.
Professor and Project Director
School of Human Ecology
Louisiana State University
Baton Rouge, LA 70803

Figure E-1. **Correspondence: Initial letter advising respondents to look for the questionnaire and requesting the participation in the study**



LSU AgCenter
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April 18, 2001

First Name Last Name
Address Line
City, State ZIP

Dear Ms. Last Name:

As a consumer, you may be aware of the media emphasis over the past few months on new and innovative fashion apparel products made with exotic leather. Our research team is studying these types of advertisements and your interest in exotic leather fashions. Our goal is to understand what you, as a female fashion consumer, think about apparel made with American alligator leather. In order to achieve this goal, information is needed about what you, the consumer, think about these products.

Your name was randomly selected from consumers in eight major cities that are considered to represent the fashion centers of the U.S. In order that the results of the study truly represent the opinions of female consumers like yourself, it is important that each questionnaire be completed by you, folded, and returned in the envelope provided. The first 100 respondents to return the completed questionnaire will receive a genuine American alligator leather key chain with our compliments. The advertisement for American alligator leather included in the survey is yours to keep.

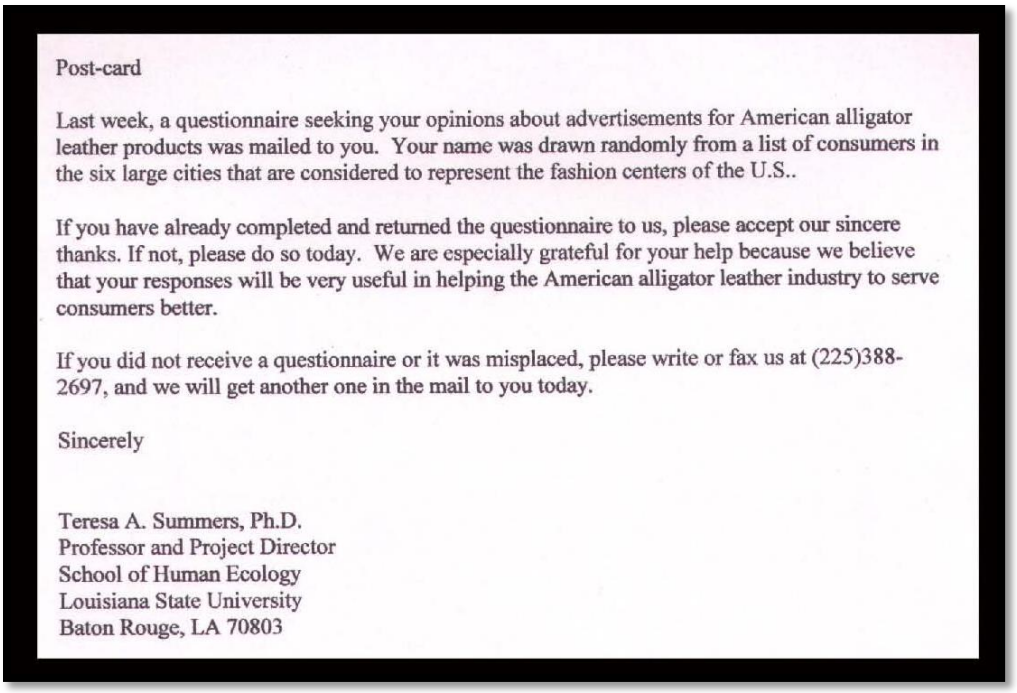
You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so that we may check your name off the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire itself.

We would be happy to answer any questions you have about this study. Please write to the School of Human Ecology, LSU, Baton Rouge, LA 70803 or fax (225) 578-2697. Thank you very much for your assistance.

Sincerely,

Teresa A. Summers, Ph.D.
Alumni Professor and Project Director
Division of Textiles, Apparel Design,
and Merchandising
School of Human Ecology
Louisiana State University
Baton Rouge, LA 70803

Figure E-2. **Correspondence: Letter enclosed with the initial questionnaire**



Post-card

Last week, a questionnaire seeking your opinions about advertisements for American alligator leather products was mailed to you. Your name was drawn randomly from a list of consumers in the six large cities that are considered to represent the fashion centers of the U.S..

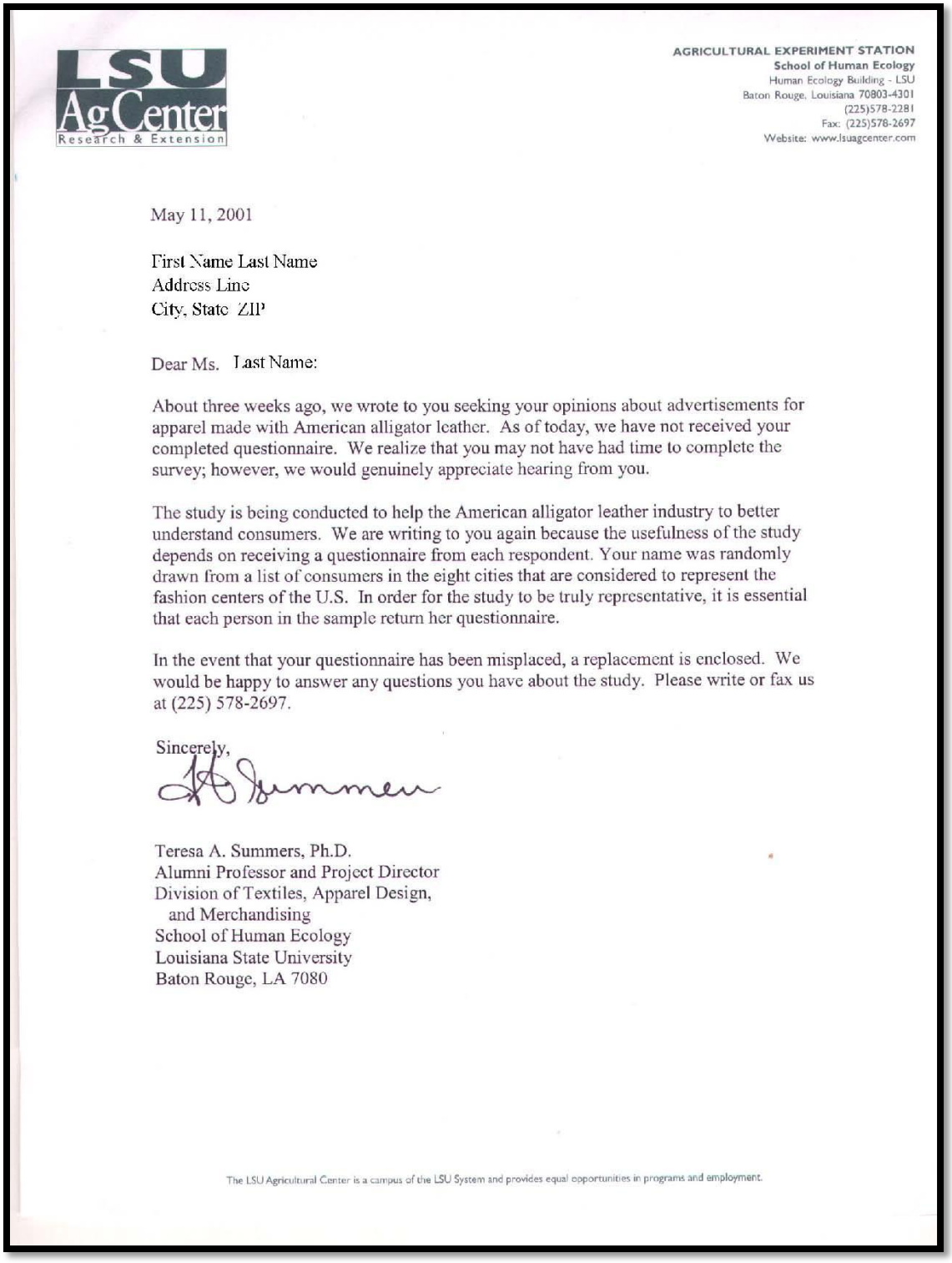
If you have already completed and returned the questionnaire to us, please accept our sincere thanks. If not, please do so today. We are especially grateful for your help because we believe that your responses will be very useful in helping the American alligator leather industry to serve consumers better.

If you did not receive a questionnaire or it was misplaced, please write or fax us at (225)388-2697, and we will get another one in the mail to you today.

Sincerely

Teresa A. Summers, Ph.D.
Professor and Project Director
School of Human Ecology
Louisiana State University
Baton Rouge, LA 70803

Figure E-3. **Correspondence: Postcard to remind respondents to complete and mail their questionnaire**



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Website: www.lsuagcenter.com

May 11, 2001

First Name Last Name
Address Line
City, State ZIP

Dear Ms. Last Name:

About three weeks ago, we wrote to you seeking your opinions about advertisements for apparel made with American alligator leather. As of today, we have not received your completed questionnaire. We realize that you may not have had time to complete the survey; however, we would genuinely appreciate hearing from you.

The study is being conducted to help the American alligator leather industry to better understand consumers. We are writing to you again because the usefulness of the study depends on receiving a questionnaire from each respondent. Your name was randomly drawn from a list of consumers in the eight cities that are considered to represent the fashion centers of the U.S. In order for the study to be truly representative, it is essential that each person in the sample return her questionnaire.

In the event that your questionnaire has been misplaced, a replacement is enclosed. We would be happy to answer any questions you have about the study. Please write or fax us at (225) 578-2697.

Sincerely,

Teresa A. Summers, Ph.D.
Alumni Professor and Project Director
Division of Textiles, Apparel Design,
and Merchandising
School of Human Ecology
Louisiana State University
Baton Rouge, LA 7080

Figure E-4. **Correspondence: Letter enclosed with a second survey**

Figure E-5. **Correspondence: Business reply mail envelope enclosed with all surveys to facilitate the return of the completed survey by respondents**

APPENDIX F

COMPUTED ORDINARY LEAST-SQUARES (OLS) REGRESSION EQUATIONS (SIMPLE REGRESSION LINE EQUATIONS) THAT RESULT FROM THE LACK OF MODERTION THAT TEST THE MODEL PREDICTING LEVEL OF ADVERTISEMENT INVOLVEMENT FROM THE FIRST-ORDER EFFECTS OF FASHION INVOLVEMENT AND ADVERTISEMENT TREATMENT

A lack of moderation for advertisement involvement as measured by the Revised Personal Involvement Inventory (RPII) and its dimensions: (1) Original Personal Involvement Inventory (OPII), (2) importance, (3) pleasure, and (4) risk on fashion involvement (FI) as measured on the Fashion Involvement Index (FII) because of level of advertisement treatment implies that each level of advertisement treatment is represented by a separate regression line. Following Aiken and West (1991), the simple regression lines were computed for this study. Given the lack of moderation, each line has an identical slope, B_3 and implies that the lines will be parallel to one another and also gives the amount of units that Y is predicted to increase with a 1 unit increase in FI given that level of advertisement treatment is constant. The predicted level of advertisement involvement for Copy and Image is given by B_0 and represents respondents having a FI equal to 0. Because FI has been centered, this also corresponds to the mean of the entire sample.

Simple regression line equations

Copy and Image: $\hat{Y} = (B_3)(FI) + B_0$ (F-1)

Copy only: $\hat{Y} = (B_3)(FI) + (B_0 + B_1)$ (F-2)

Image only: $\hat{Y} = (B_3)(FI) + (B_0 + B_2)$ (F-2)

Simple regression lines RPII

Copy and Image: $\hat{Y} = (2.541)(FI) + 74.349$ (F-3)

Copy only: $\hat{Y} = (2.541)(FI) + 78.588$ (F-4)

Image only: $\hat{Y}$ = (2.541)(FI) + 71.866 (F-5)

Simple regression lines OPII

Copy and Image: $\hat{Y}$ = (2.274)(FI) + 50.657 (F-6)

Copy only: $\hat{Y}$ = (2.274)(FI) + 57.281 (F-7)

Image only: $\hat{Y}$ = (2.274)(FI) + 45.831 (F-8)

Simple regression lines importance dimension

Copy and Image: $\hat{Y}$ = (.665)(FI) + 16.746 (F-9)

Copy only: $\hat{Y}$ = (.665)(FI) + 18.974 (F-10)

Image only: $\hat{Y}$ = (.665)(FI) + 14.922 (F-11)

Simple regression lines pleasure dimension

Copy and Image: $\hat{Y}$ = (.791)(FI) + 18.938 (F-12)

Copy only: $\hat{Y}$ = (.791)(FI) + 20.501 (F-13)

Image only: $\hat{Y}$ = (.791)(FI) + 19.157 (F-14)

Simple regression lines risk dimension

Copy and Image: $\hat{Y}$ = (-.056)(FI) + 14.264 (F-15)

Copy only: $\hat{Y}$ = (-.056)(FI) + 11.958 (F-16)

Image only: $\hat{Y}$ = (-.056)(FI) + 15.522 (F-17)

APPENDIX G

MULTIPLE REGRESSION RESULTS FROM THE MODERATION ANALYSIS OF INVOLVEMENT WITH THE ADVERTISEMENT ON FASHION INVOLVEMENT ON DEMOGRAPHIC CHARACTERISTICS

Table G-1. **Moderation analysis: The regression of involvement with the advertisement as measured by the RPII on fashion involvement (FI) as measured by the FII on race**

	B	***SE***	***β***	***t***	***Sig.***	***r***	***pr***	***sr***
Main Effects								
(Constant)	74.558	1.831		40.713	.000			
FI	2.549	.652	.259	3.910	.000	.262	.259	.259
Race D_1	2.747	3.766	.048	.729	.467	.064	.050	.048
Regression *MS* = 4459.095; $F(2, 212) = 8.111$; $p < .01$; $R^2 = .071$; Adjusted $R^2 = .062$ Residual *MS* = 549.744								
Full Model								
(Constant)	74.590	1.829		40.792	.000			
FI	3.074	.767	.313	4.009	.000	.262	.266	.265
Race D_1	3.105	3.770	.055	.823	.411	.064	.057	.054
FI X Race D_1	-1.878	1.450	-.101	-1.295	.197	.070	-.089	-.086
Regression *MS* = 3278.988; $F(3, 211) = 5.984$; $p < .01$; $R^2 = .078$; Adjusted $R^2 = .065$ Residual *MS* = 547.995								
$F(1, 211) = 1.677$; $\Delta R^2 = .007$; $p = .197$								

Note. For all G Tables * $p < .05$ ** $p < .01$

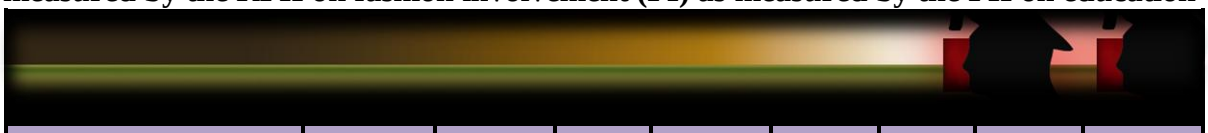
Table G-2. **Moderation analysis: The regression of involvement with the advertisement as measured by the RPII on fashion involvement (FI) as measured by the FII on age**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	73.924	2.844		25.989	.000			
FI	2.710	.641	.281	4.227	.000	.275	.277	.277
Age 41- 60 D_1	1.574	3.620	.033	.435	.664	-.008	.030	.028
Age 61- over D_2	2.554	4.743	.041	.538	.591	-.005	.037	.035
Regression *MS* = 3258.606; *F*(3, 215) = 5.967; $p < .01$; $R^2 = .077$; Adjusted $R^2 = .064$ Residual *MS* = 546.146								
Full Model								
(Constant)	74.730	2.898		25.790	.000			
FI	1.477	1.186	.153	1.245	.215	.275	.085	.081
Age 41 – 60 D_1	.947	3.641	.020	.260	.795	-.008	.018	.017
Age 61 – over D_2	.354	4.804	.006	.074	.941	-.005	.005	.005
FI X Age 41- 60 D_1	2.428	1.450	.189	1.674	.096	.304	.114	.109
FI X Age 61 – over D_2	-1.367	2.123	-.052	-.644	.520	.005	-.044	-.042
Regression *MS* = 2526.818; *F*(5, 213) = 4.698; $p < .01$; $R^2 = .099$; Adjusted $R^2 = .078$ Residual *MS* = 537.855								
F (2, 213) = 2.657; $\Delta R^2 = .022$; $p = .072$								

Table G-3. **Moderation analysis: The regression of involvement with the advertisement as measured by the RPII on fashion involvement (FI) as measured by the FII on marital status**

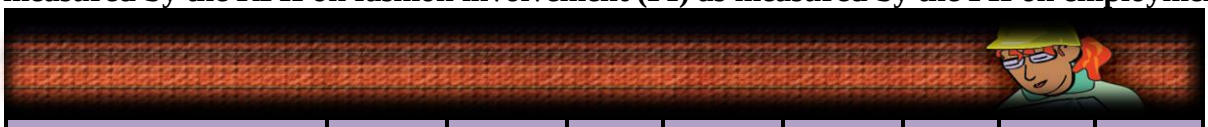
	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	75.048	1.793		41.850	.000			
FI	2.606	.631	.271	4.133	.000	.270	.271	.271
Not Married D_1	.899	3.757	.016	.239	.811	-.003	.016	.016
Regression *MS* = 4628.958; *F*(2, 216) = 8.540; $p < .01$; $R^2 = .073$; Adjusted $R^2 = .065$ Residual *MS* = 542.057								
Full Model								
(Constant)	75.081	1.796		41.811	.000			
FI	2.382	.701	.248	3.397	.001	.270	.226	.223
Not Married D_1	1.111	3.772	.019	.295	.769	-.003	.020	.019
FI X Not Married D_1	1.180	1.610	.054	.733	.464	.161	.050	.048
Regression *MS* = 3183.270; *F*(3, 215) = 5.860; $p < .01$; $R^2 = .076$; Adjusted $R^2 = .063$ Residual *MS* = 543.221								
F(1, 215) = .537; $\Delta R^2 = .002$; $p = .464$								

Table G-4. **Moderation analysis: The regression of involvement with the advertisement as measured by the RPII on fashion involvement (FI) as measured by the FII on education**



	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	74.568	2.131		34.991	.000			
FI	2.721	.634	.283	4.291	.000	.282	.283	.283
No College D_1	.888	3.205	.018	.277	.782	.009	.019	.018
Regression *MS* = 5012.712; *F*(2, 212) = 9.216; *p* < .01; R^2 = .080; Adjusted R^2 = .071 Residual *MS* = 543.927								
Full Model								
(Constant)	74.603	2.137		34.912	.000			
FI	2.476	.863	.257	2.870	.005	.282	.194	.189
No College D_1	.859	3.212	.018	.267	.789	.009	.018	.018
FI X No College D_1	.534	1.275	.038	.419	.676	.212	.029	.028
Regression *MS* = 3373.722; *F*(3, 211) = 6.178; *p* < .01; R^2 = .081; Adjusted R^2 = .068 Residual *MS* = 546.051								
F(1, 211) = .175; ΔR^2 = .001; *p* = .676								

Table G-5. **Moderation analysis: The regression of involvement with the advertisement as measured by the RPII on fashion involvement (FI) as measured by the FII on employment**



	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	76.524	1.940		39.440	.000			
FI	2.511	.632	.261	3.975	.000	.264	.262	.261
Not Employed D_1	-4.075	3.352	-.080	-1.216	.225	-.089	-.083	-.080
Regression *MS* = 4809.605; *F*(2, 215) = 8.829; *p* < .01; R^2 = .076; Adjusted R^2 = .067 Residual *MS* = 544.780								
Full Model								
(Constant)	76.454	1.940		39.418	.000			
FI	3.021	.768	.314	3.934	.000	.264	.260	.258
Not Employed D_1	-4.068	3.349	-.080	-1.215	.226	-.089	-.083	-.080
FI X Not Employed D_1	-1.573	1.348	-.093	-1.166	.245	.087	-.079	-.076
Regression *MS* = 3452.973; *F*(3, 214) = 6.349; *p* < .01; R^2 = .082; Adjusted R^2 = .069 Residual *MS* = 543.869								
F(1, 214) = 1.360; ΔR^2 = .006; *p* = .245								

Table G-6. **Moderation analysis: The regression of involvement with the advertisement as measured by the RPII on fashion involvement (FI) as measured by the FII on affluence**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	77.610	2.252		34.470	.000			
FI	2.581	.656	.270	3.937	.000	.285	.268	.265
Not Affluent D_1	-3.878	3.277	-.081	-1.183	.238	-.131	-.083	-.080
Regression *MS* = 5090.485; *F*(2, 201) = 9.634; $p < .01$; $R^2 = .087$; Adjusted $R^2 = .078$ Residual *MS* = 528.414								
Full Model								
(Constant)	77.617	2.274		34.128	.000			
FI	2.567	.909	.268	2.823	.005	.285	.196	.191
Not Affluent D_1	-3.877	3.286	-.081	-1.180	.239	-.131	-.083	-.080
FI X Not Affluent D_1	.030	1.316	.002	.023	.982	.201	.002	.002
Regression *MS* = 3393.747; *F*(3, 200) = 6.391; $p < .01$; $R^2 = .087$; Adjusted $R^2 = .074$ Residual *MS* = 531.055								
$F(1, 200) = .001$; $\Delta R^2 = .000$; $p = .982$								

Table G-7. **Moderation analysis: The regression of involvement with the advertisement as measured by the OPII on fashion involvement (FI) as measured by the FII on race**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	51.012	1.742		29.277	.000			
FI	2.404	.620	.257	3.877	.000	.260	.257	.257
Race D_1	2.236	3.583	.041	.624	.533	.057	.043	.041
Regression *MS* = 3923.605; *F*(2, 212) = 7.884; $p < .01$; $R^2 = .069$; Adjusted $R^2 = .060$ Residual *MS* = 497.654								
Full Model								
(Constant)	51.035	1.743		29.283	.000			
FI	2.777	.731	.297	3.800	.000	.260	.253	.252
Race D_1	2.490	3.593	.046	.693	.489	.057	.048	.046
FI X Race D_1	-1.332	1.382	-.076	-.964	.336	.087	-.066	-.064
Regression *MS* = 2769.924; *F*(3, 211) = 5.564; $p < .01$; $R^2 = .073$; Adjusted $R^2 = .060$ Residual *MS* = 497.820								
$F(1, 211) = .929$; $\Delta R^2 = .004$; $p = .336$								

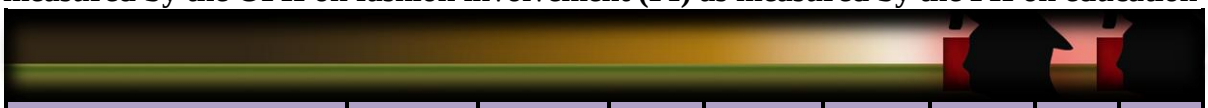
Table G-8. **Moderation analysis: The regression of involvement with the advertisement as measured by the OPII on fashion involvement (FI) as measured by the FII on age**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	50.268	2.703		18.599	.000			
FI	2.517	.609	.275	4.131	.000	.269	.271	.271
Age 41- 60 D_1	1.813	3.439	.040	.527	.599	.003	.036	.035
Age 61 – over D_2	2.055	4.507	.034	.456	.649	-.014	.031	.030
Regression *MS* = 2812.368; *F*(3, 215) = 5.704; *p* < .01; R^2 = .074; Adjusted R^2 = .061 Residual *MS* = 493.095								
Full Model								
(Constant)	51.045	2.752		18.545	.000			
FI	1.328	1.127	.145	1.178	.240	.269	.080	.077
Age 41- 60 D_1	1.209	3.459	.026	.350	.727	.003	.024	.023
Age 61 – over D_2	-.059	4.563	-.001	-.013	.990	-.014	-.001	-.001
FI X Age 41- 60 D_1	2.338	1.378	.192	1.697	.091	.301	.115	.111
FI X Age 61 – over D_2	-1.306	2.016	-.052	-.648	.518	.004	-.044	-.042
Regression *MS* = 2215.599; *F*(5, 213) = 4.565; *p* < .01; R^2 = .097; Adjusted R^2 = .076 Residual *MS* = 485.326								
F(2, 213) = 2.721; ΔR^2 = .023; *p* = .068								

Table G-9. **Moderation analysis: The regression of involvement with the advertisement as measured by the OPII on fashion involvement (FI) as measured by the FII on marital status**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	51.456	1.702		30.227	.000			
FI	2.407	.599	.264	4.020	.000	.263	.264	.264
Not Married D_1	.800	3.566	.015	.224	.823	-.003	.015	.015
Regression *MS* = 3948.120; *F*(2, 216) = 8.083; *p* < .01; R^2 = .070; Adjusted R^2 = .061 Residual *MS* = 488.467								
Full Model								
(Constant)	51.487	1.705		30.204	.000			
FI	2.194	.666	.241	3.295	.001	.263	.219	.216
Not Married D_1	1.003	3.581	.018	.280	.780	-.003	.019	.018
FI X Not Married D_1	1.125	1.529	.054	.736	.463	.158	.050	.048
Regression *MS* = 2720.415; *F*(3, 215) = 5.557; *p* < .01; R^2 = .072; Adjusted R^2 = .059 Residual *MS* = 489.506								
F (1, 215) = .541; ΔR^2 = .002; *p* = .463								

Table G-10. **Moderation analysis: The regression of involvement with the advertisement as measured by the OPII on fashion involvement (FI) as measured by the FII on education**



	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	50.545	2.026		24.953	.000			
FI	2.537	.603	.278	4.209	.000	.277	.278	.278
No College D_1	1.717	3.046	.037	.564	.574	.028	.039	.037
Regression *MS* = 4396.663; *F*(2, 212) = 8.947; *p* < .01; R^2 = .078; Adjusted R^2 = .069 Residual *MS* = 491.417								
Full Model								
(Constant)	50.571	2.031		24.894	.000			
FI	2.355	.820	.258	2.871	.005	.277	.194	.190
No College D_1	1.695	3.053	.037	.555	.579	.028	.038	.037
FI X No College D_1	.397	1.212	.029	.327	.744	.204	.023	.022
Regression *MS* = 2948.715; *F*(3, 211) = 5.975; *p* < .01; R^2 = .078; Adjusted R^2 = .065 Residual *MS* = 493.495								
F(1, 211) = .107; ΔR^2 = .000; *p* = .744								

Table G-11. **Moderation analysis: The regression of involvement with the advertisement as measured by the OPII on fashion involvement (FI) as measured by the FII on employment status**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	53.029	1.839		28.830	.000			
FI	2.299	.599	.252	3.839	.000	.256	.253	.252
Not Employed D_1	-4.332	3.178	-.090	-1.363	.174	-.099	-.093	-.090
Regression *MS* = 4163.117; *F*(2, 215) = 8.503; *p* < .01; R^2 = .073; Adjusted R^2 = .065 Residual *MS* = 489.616								
Full Model								
(Constant)	52.977	1.841		28.777	.000			
FI	2.681	.729	.294	3.678	.000	.256	.244	.242
Not Employed D_1	-4.327	3.179	-.089	-1.361	.175	-.099	-.093	-.089
FI X Not Employed D_1	-1.176	1.280	-.073	-.919	.359	.096	-.063	-.060
Regression *MS* = 2913.324; *F*(3, 214) = 5.946; *p* < .01; R^2 = .077; Adjusted R^2 = .064 Residual *MS* = 489.970								
F(1, 214) = .844; ΔR^2 = .004; *p* = .359								

Table G-12. **Moderation analysis: The regression of involvement with the advertisement as measured by the OPII on fashion involvement (FI) as measured by the FII on affluence**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	53.716	2.149		24.994	.000			
FI	2.450	.626	.268	3.915	.000	.284	.266	.264
Not Affluent D_1	-3.770	3.128	-.083	-1.205	.230	-.132	-.085	-.081
Regression *MS* = 4613.823; *F*(2, 201) = 9.583; *p* < .01; R^2 = .087; Adjusted R^2 = .078 Residual *MS* = 481.451								
Full Model								
(Constant)	53.657	2.171		24.719	.000			
FI	2.583	.868	.283	2.977	.003	.284	.206	.201
Not Affluent D_1	-3.781	3.136	-.083	-1.206	.229	-.132	-.085	-.081
FI X Not Affluent D_1	-.279	1.256	-.021	-.222	.824	.188	-.016	-.015
Regression *MS* = 3083.838; *F*(3, 200) = 6.357; *p* < .01; R^2 = .087; Adjusted R^2 = .074 Residual *MS* = 483.739								
F(1, 220) = .049; ΔR^2 = .000; *p* = .824								

Table G-13. **Moderation analysis: The regression of involvement with the advertisement as measured by the importance dimension on fashion involvement (FI) as measured by the FII on race**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	16.885	.617		27.347	.000			
FI	.706	.220	.215	3.212	.002	.217	.215	.215
Race D_1	.618	1.273	.033	.485	.628	.046	.033	.032
Regression *MS* = 339.092; *F*(2, 213) = 5.395; *p* < .05; R^2 = .048; Adjusted R^2 = .039 Residual *MS* = 62.852								
Full Model								
(Constant)	16.895	.618		27.357	.000			
FI	.839	.259	.256	3.244	.001	.217	.217	.217
Race D_1	.707	1.276	.037	.554	.580	.046	.038	.037
FI X Race D_1	-.480	.491	-.077	-.978	.329	.062	-.067	-.065
Regression *MS* = 246.105; *F*(3, 212) = 3.915; *p* < .05; R^2 = .052; Adjusted R^2 = .039 Residual *MS* = 62.865								
F(1, 212) = .957; ΔR^2 = .004; *p* = .329								

Table G-14. **Moderation analysis: The regression of involvement with the advertisement as measured by the importance dimension on fashion involvement (FI) as measured by the FII on age**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	16.385	.959		17.093	.000			
FI	.764	.216	.238	3.542	.000	.227	.234	.234
Age 41- 60 D_1	.560	1.218	.035	.459	.646	-.022	.031	.030
Age 61 – over D_2	1.691	1.599	.080	1.058	.291	.039	.072	.070
Regression *MS* = 266.734; *F*(3, 216) = 4.300; $p < .01$; $R^2 = .056$; Adjusted $R^2 = .043$ Residual *MS* = 62.031								
Full Model								
(Constant)	16.557	.984		16.822	.000			
FI	.501	.403	.156	1.243	.215	.227	.085	.082
Age 41- 60 D_1	.430	1.235	.027	.348	.728	-.022	.024	.023
Age 61 over D_2	1.242	1.632	.059	.761	.447	.039	.052	.050
FI X Age 41- 60 D_1	.507	.492	.119	1.030	.304	.237	.070	.068
FI X Age 61 – over D_2	-.255	.721	-.029	-.353	.724	.018	-.024	-.023
Regression *MS* = 183.891; *F*(5, 214) = 2.963; $p < .05$; $R^2 = .065$; Adjusted $R^2 = .043$ Residual *MS* = 62.054								
$F(2, 214) = .961$; $\Delta R^2 = .008$; $p = .384$								

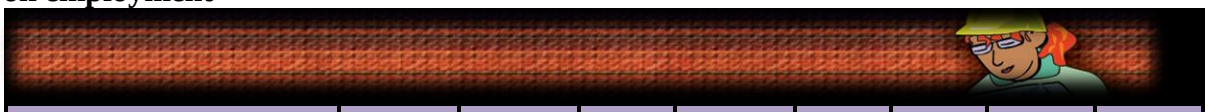
Table G-15. **Moderation analysis: The regression of involvement with the advertisement as measured by the importance dimension on fashion involvement (FI) as measured by the FII on marital status**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	16.913	.603		28.054	.000			
FI	.724	.212	.226	3.415	.001	.224	.226	.226
Not Married D_1	.572	1.266	.030	.452	.652	.015	.031	.030
Regression *MS* = 361.236; *F*(2, 217) = 5.858; $p < .01$; $R^2 = .051$; Adjusted $R^2 = .042$ Residual *MS* = 61.661								
Full Model								
(Constant)	16.921	.604		28.017	.000			
FI	.666	.236	.208	2.823	.005	.224	.189	.187
Not Married D_1	.629	1.272	.033	.495	.621	.015	.034	.033
FI X Not Married D_1	.310	.543	.042	.572	.568	.130	.039	.038
Regression *MS* = 247.562; *F*(3, 216) = 4.002; $p < .01$; $R^2 = .053$; Adjusted $R^2 = .040$ Residual *MS* = 61.853								
$F(1, 216) = .327$; $\Delta R^2 = .001$; $p = .568$								

Table G-16. **Moderation analysis: The regression of involvement with the advertisement as measured by the importance dimension on fashion involvement (FI) as measured by the FII on education**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	16.957	.720		23.556	.000			
FI	.752	.214	.234	3.505	.001	.234	.234	.234
No College D_1	.009	1.085	.001	.008	.994	-.006	.001	.001
Regression *MS* = 384.932; *F*(2, 213) = 6.148; *p* < .01; R^2 = .055; Adjusted R^2 = .046 Residual *MS* = 62.616								
Full Model								
(Constant)	16.959	.722		23.490	.000			
FI	.738	.291	.229	2.532	.012	.234	.171	.169
No College D_1	.007	1.088	.000	.007	.995	-.006	.000	.000
FI X No College D_1	.031	.432	.007	.072	.942	.161	.005	.005
Regression *MS* = 256.731; *F*(3, 212) = 4.081; *p* < .01; R^2 = .055; Adjusted R^2 = .041 Residual *MS* = 62.909								
F(1, 212) = .000; ΔR^2 = .005; *p* = .942								

Table G-17. **Moderation analysis: The regression of involvement with the advertisement as measured by the importance dimension on fashion involvement (FI) as measured by the FII on employment**



	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	17.292	.656		26.350	.000			
FI	.687	.213	.214	3.224	.001	.216	.214	.214
Not Employed D_1	-.794	1.129	-.047	-.704	.482	-.056	-.048	-.047
Regression *MS* = 346.216; *F*(2, 216) = 5.556; *p* < .01; R^2 = .049; Adjusted R^2 = .040 Residual *MS* = 62.318								
Full Model								
(Constant)	17.281	.658		26.278	.000			
FI	.769	.260	.240	2.954	.003	.216	.197	.196
Not Employed D_1	-.799	1.131	-.047	-.707	.481	-.056	-.048	-.047
FI X Not Employed D_1	-.250	.455	-.045	-.549	.583	.094	-.037	-.036
Regression *MS* = 237.096; *F*(3, 215) = 3.792; *p* < .05; R^2 = .050; Adjusted R^2 = .037 Residual *MS* = 62.520								
F(1, 215) = .302; ΔR^2 = .001; *p* = .583								

Table G-18. **Moderation analysis: The regression of involvement with the advertisement as measured by the importance dimension on fashion involvement (FI) as measured by the FII on affluence**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	17.717	.770		23.018	.000			
FI	.744	.224	.230	3.322	.001	.245	.228	.226
Not Affluent D_1	-1.260	1.120	-.078	-1.124	.262	-.120	-.079	-.077
Regression *MS* = 437.000; *F*(2, 201) = 7.077; $p < .01$; $R^2 = .066$; Adjusted $R^2 = .056$ Residual *MS* = 61.753								
Full Model								
(Constant)	17.728	.777		22.802	.000			
FI	.720	.311	.223	2.316	.022	.245	.162	.158
Not Affluent D_1	-1.258	1.123	-.078	-1.120	.264	-.120	-.079	-.077
FI X Not Affluent D_1	.051	.450	.011	.114	.909	.177	.008	.008
Regression *MS* = 291.604; *F*(3, 200) = 4.699; $p < .01$; $R^2 = .066$; Adjusted $R^2 = .052$ Residual *MS* = 62.058								
F(1, 200) = .013; $\Delta R^2 = .000$; $p = .909$								

Table G-19. **Moderation analysis: The regression of involvement with the advertisement as measured by the pleasure dimension on fashion involvement (FI) as measured by the FII on race**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	19.382	.616		31.487	.000			
FI	.795	.221	.238	3.602	.000	.242	.239	.238
Race D_1	1.271	1.275	.066	.997	.320	.079	.068	.066
Regression *MS* = 456.185; *F*(2, 215) = 7.210; $p < .01$; $R^2 = .063$; Adjusted $R^2 = .054$ Residual *MS* = 63.267								
Full Model								
(Constant)	19.388	.615		31.517	.000			
FI	.950	.260	.285	3.661	.000	.242	.243	.242
Race D_1	1.381	1.277	.072	1.081	.281	.079	.074	.071
FI X Race D_1	-.559	.492	-.089	-1.135	.258	.069	-.077	-.075
Regression *MS* = 331.259; *F*(3, 214) = 5.243; $p < .01$; $R^2 = .068$; Adjusted $R^2 = .055$ Residual *MS* = 63.182								
F(1, 214) = 1.288; $\Delta R^2 = .006$; $p = .258$								

Table G-20. **Moderation analysis: The regression of involvement with the advertisement as measured by the pleasure dimension on fashion involvement (FI) as measured by the FII was dependent of race**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	19.429	.960		20.240	.000			
FI	.818	.217	.250	3.763	.000	.250	.247	.246
Age 41- 60 D_1	.585	1.222	.036	.479	.000	.026	.032	.031
Age 61 – over D_2	-.428	1.594	-.020	-.269	.633	-.063	-.018	-.018
Regression *MS* = 316.938; *F*(3, 218) = 5.027; *p* < .01; R^2 = .065; Adjusted R^2 = .052 Residual *MS* = 63.049								
Full Model								
(Constant)	19.642	.976		20.124	.000			
FI	.497	.402	.152	1.239	.217	.250	.084	.080
Age 41- 60 D_1	.431	1.227	.026	.351	.726	.026	.024	.023
Age 61 – over D_2	-1.206	1.606	-.057	-.751	.454	-.063	-.051	-.049
FI X Age 41- 60 D_1	.742	.491	.171	1.512	.132	.283	.102	.098
FI X Age 61 – over D_2	-.832	.714	-.093	-1.165	.245	-.023	-.079	-.076
Regression *MS* = 272.595; *F*(5, 216) = 4.416; *p* < .01; R^2 = .093; Adjusted R^2 = .072 Residual *MS* = 61.725								
F(2, 216) = 3.339; ΔR^2 = .028; *p* < .05*								

Table G-21. **Moderation analysis: The regression of involvement with the advertisement as measured by the pleasure dimension on fashion involvement (FI) as measured by the FII on marital status**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	19.658	.607		32.382	.000			
FI	.794	.214	.243	3.705	.000	.243	.243	.243
Not Married D_1	-.008	1.267	.000	-.006	.995	-.016	.000	.000
Regression *MS* = 433.164; *F*(2, 219) = 6.895; *p* < .01; R^2 = .059; Adjusted R^2 = .051 Residual *MS* = 62.818								
Full Model								
(Constant)	19.675	.607		32.407	.000			
FI	.685	.238	.210	2.875	.004	.243	.191	.188
Not Married D_1	.079	1.270	.004	.062	.950	-.016	.004	.004
FI X Not Married D_1	.573	.545	.077	1.051	.294	.169	.071	.069
Regression *MS* = 311.916; *F*(3, 218) = 4.968; *p* < .01; R^2 = .064; Adjusted R^2 = .051 Residual *MS* = 62.788								
F(1, 218) = 1.106; ΔR^2 = .005; *p* = .294								

Table G-22. **Moderation analysis: The regression of involvement with the advertisement as measured by the pleasure dimension on fashion involvement (FI) as measured by the FII on education**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	19.361	.725		26.707	.000			
FI	.836	.215	.256	3.885	.000	.255	.256	.256
No College D_1	.534	1.081	.033	.494	.622	.026	.034	.033
Regression *MS* = 479.778; *F*(2, 215) = 7.623; $p < .01$; $R^2 = .066$; Adjusted $R^2 = .058$ Residual *MS* = 62.941								
Full Model								
(Constant)	19.378	.727		26.669	.000			
FI	.719	.293	.220	2.451	.015	.255	.165	.162
No College D_1	.514	1.083	.031	.475	.635	.026	.032	.031
FI X No College D_1	.255	.433	.053	.589	.556	.202	.040	.039
Regression *MS* = 327.160; *F*(3, 214) = 5.182; $p < .01$; $R^2 = .068$; Adjusted $R^2 = .055$ Residual *MS* = 63.133								
$F(1, 214) = .347$; $\Delta R^2 = .002$; $p = .556$								

Table G-23. **Moderation analysis: The regression of involvement with the advertisement as measured by the pleasure dimension on fashion involvement (FI) as measured by the FII on employment status**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	20.555	.646		31.819	.000			
FI	.772	.211	.237	3.651	.000	.243	.240	.237
Not Employed D_1	-2.686	1.116	-.156	-2.407	.017	-.165	-.161	-.156
Regression *MS* = 605.858; *F*(2, 218) = 9.901; $p < .01$; $R^2 = .083$; Adjusted $R^2 = .075$ Residual *MS* = 61.195								
Full Model								
(Constant)	20.528	.646		31.792	.000			
FI	.950	.257	.292	3.698	.000	.243	.243	.240
Not Employed D_1	-2.674	1.115	-.156	-2.399	.017	-.165	-.161	-.155
FI X Not Employed D_1	-.549	.451	-.096	-1.217	.225	.072	-.082	-.079
Regression *MS* = 434.047; *F*(3, 217) = 7.109; $p < .01$; $R^2 = .089$; Adjusted $R^2 = .077$ Residual *MS* = 61.060								
$F(1, 217) = 1.481$; $\Delta R^2 = .006$; $p = .225$								

Table G-24. **Moderation analysis: The regression of involvement with the advertisement as measured by the pleasure dimension on fashion involvement (FI) as measured by the FII on affluence**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	20.641	.745		27.703	.000			
FI	.774	.217	.243	3.561	.000	.261	.242	.239
Not Affluent D_1	-1.569	1.080	-.099	-1.453	.148	-.143	-.101	-.098
Regression *MS* = 502.232; *F*(2, 204) = 8.604; *p* < .01; R^2 = .078; Adjusted R^2 = .069 Residual *MS* = 58.375								
Full Model								
(Constant)	20.639	.753		27.413	.000			
FI	.780	.302	.245	2.582	.011	.261	.178	.174
Not Affluent D_1	-1.570	1.083	-.099	-1.449	.149	-.143	-.101	-.098
FI X Not Affluent D_1	-.013	.436	-.003	-.029	.977	.182	-.002	-.002
Regression *MS* = 334.837; *F*(3, 203) = 5.708; *p* < .01; R^2 = .078; Adjusted R^2 = .064 Residual *MS* = 58.662								
F(1, 203) = .001; ΔR^2 = .000; *p* = .977								

Table G-25. **Moderation analysis: The regression of involvement with the advertisement as measured by the risk dimension on fashion involvement (FI) as measured by the FII on race**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	13.939	.304		45.849	.000			
FI	-.142	.109	-.089	-1.305	.193	-.091	-.088	-.088
Race D_1	-.427	.631	-.046	-.677	.499	-.051	-.046	-.046
Regression *MS* = 17.656; *F*(2, 216) = 1.137; *p* = .323; R^2 = .010; Adjusted R^2 = .001 Residual *MS* = 15.522								
Full Model								
(Constant)	13.942	.304		45.827	.000			
FI	-.085	.128	-.053	-.662	.509	-.091	-.045	-.045
Race D_1	-.387	.633	-.042	-.611	.542	-.051	-.042	-.041
FI X Race D_1	-.207	.244	-.068	-.851	.396	-.100	-.058	-.058
Regression *MS* = 15.523; *F*(3, 215) = .999; *p* = .394; R^2 = .014; Adjusted R^2 = .000 Residual *MS* = 15.542								
F(1, 215) = .724; ΔR^2 = .003; *p* = .396								

Table G-26. **Moderation analysis: The regression of involvement with the advertisement as measured by the risk dimension on fashion involvement (FI) as measured by the FII on age**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	13.907	.471		29.501	.000			
FI	-.118	.107	-.075	-1.107	.270	-.079	-.075	-.074
Age 41 – 60 D_1	-.536	.600	-.068	-.894	.372	-.108	-.060	-.060
Age 41 – 60 D_2	.986	.783	.097	1.259	.209	.136	.085	.084
Regression *MS* = 30.205; *F*(3, 219) = 1.986; *p* = .117; R^2 = .026; Adjusted R^2 = .013 Residual *MS* = 15.206								
Full Model								
(Constant)	13.774	.485		28.416	.000			
FI	.083	.199	.053	.416	.678	-.079	.028	.028
Age 41 – 60 D_1	-.421	.608	-.054	-.693	.489	-.108	-.047	-.046
Age 61 – over D_2	1.155	.798	.113	1.448	.149	.136	.098	.097
FI X Age 41- 60 D_1	-.316	.243	-.151	-1.298	.196	-.107	-.088	-.087
FI X Age 61 – over D_2	-.127	.355	-.030	-.358	.721	-.038	-.024	-.024
Regression *MS* = 23.473; *F*(5, 217) = 1.542; *p* = .178; R^2 = .034; Adjusted R^2 = .012 Residual *MS* = 15.223								
F(2, 217) = .879; ΔR^2 = .008; *p* = .417								

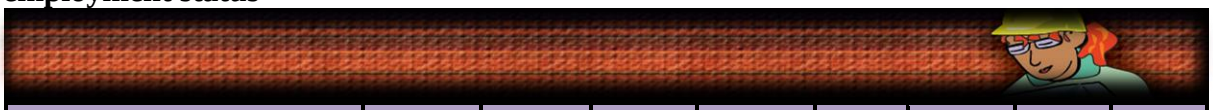
Table G-27. **Moderation analysis: The regression of involvement with the advertisement as measured by the risk dimension on fashion involvement (FI) as measured by the FII on marital status**

	B	*SE*	*β*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	13.766	.300		45.905	.000			
FI	-.111	.106	-.071	-1.048	.296	-.072	-.070	-.070
Not Married D_1	.190	.627	.020	.302	.763	.025	.020	.020
Regression *MS* = 9.520; *F*(2, 220) = .617; *p* = .540; R^2 = .006; Adjusted R^2 = -.003 Residual *MS* = 15.429								
Full Model								
(Constant)	13.759	.300		45.857	.000			
FI	-.063	.118	-.040	-.532	.595	-.072	-.036	-.036
Not Married D_1	.150	.629	.016	.238	.812	.025	.016	.016
FI X Not Married D_1	-.255	.270	-.071	-.945	.346	-.090	-.064	-.064
Regression *MS* = 10.939; *F*(3, 219) = .709; *p* = .548; R^2 = .010; Adjusted R^2 = -.004 Residual *MS* = 15.436								
F(1, 219) = .893; ΔR^2 = .004; *p* = .346								

Table G-28. **Moderation analysis: The regression of involvement with the advertisement as measured by the risk dimension on fashion involvement (FI) as measured by the FII on education**

	B	*SE*	*B*	*t*	*Sig.*	*R*	*pr*	*sr*
Main Effects								
(Constant)	13.768	.358		38.445	.000			
FI	-.129	.107	-.082	-1.213	.227	-.083	-.082	-.082
No College D_1	.122	.535	.015	.228	.820	.017	.015	.015
Regression *MS* = 11.891; *F*(2, 216) = .767; *p* = .466; R^2 = .007; Adjusted R^2 = -.002 Residual *MS* = 15.498								
Full Model								
(Constant)	13.767	.359		38.332	.000			
FI	-.124	.145	-.079	-.854	.394	-.083	-.058	-.058
No College D_1	.123	.537	.016	.229	.819	.017	.016	.016
FI X No College D_1	-.012	.214	-.005	-.056	.956	-.058	-.004	-.004
Regression *MS* = 7.943; *F*(3, 215) = .510; *p* = .676; R^2 = .007; Adjusted R^2 = -.007 Residual *MS* = 15.570								
F(1, 215) = .000; ΔR^2 = .003; *p* = .956								

Table G-29. **Moderation analysis: The regression of involvement with the advertisement as measured by the risk dimension on fashion involvement (FI) as measured by the FII on employment status**



	B	*SE*	*B*	*t*	*Sig.*	*r*	*pr*	*sr*
Main Effects								
(Constant)	13.361	.321		41.611	.000			
FI	-.090	.105	-.057	-.862	.390	-.064	-.058	-.057
Not Employed D_1	1.299	.552	.157	2.352	.020	.159	.157	.157
Regression *MS* = 48.861; *F*(2, 219) = 3.232; *p* < .05; R^2 = .029; Adjusted R^2 = .020 Residual *MS* = 15.118								
Full Model								
(Constant)	13.362	.322		41.498	.000			
FI	-.101	.128	-.064	-.789	.431	-.064	-.053	-.053
Not Employed D_1	1.299	.553	.157	2.347	.020	.159	.157	.157
FI X Not Employed D_1	.033	.224	.012	.147	.883	-.029	.010	.010
Regression *MS* = 32.683; *F*(3, 218) = 2.152; *p* = .095; R^2 = .029; Adjusted R^2 = .015 Residual *MS* = 15.185								
F (1, 218) = .022; ΔR^2 = .000; *p* = .883								

Table G-30. **Moderation analysis: The regression of involvement with the advertisement as measured by the risk dimension on fashion involvement (FI) as measured by the FII on affluence**

	B	***SE***	***B***	***t***	***Sig.***	***r***	***pr***	***sr***
Main Effects								
(Constant)	13.445	.377		35.638	.000			
FI	-.136	.110	-.087	-1.240	.216	-.108	-.087	-.086
Not Affluent D_1	.925	.547	.119	1.691	.092	.134	.118	.117
Regression *MS* = 39.832; $F(2, 204) = 2.662$; $p = .072$; $R^2 = .025$; Adjusted $R^2 = .016$ Residual *MS* = 14.965								
Full Model								
(Constant)	13.470	.381		35.360	.000			
FI	-.192	.153	-.123	-1.258	.210	-.108	-.088	-.087
Not Affluent D_1	.926	.548	.119	1.691	.092	.134	.118	.117
FI X Not Affluent D_1	.116	.221	.051	.527	.599	-.050	.037	.036
Regression *MS* = 27.942; $F(3, 203) = 1.861$; $p = .137$; $R^2 = .027$; Adjusted $R^2 = .012$ Residual *MS* = 15.018								
$F(1, 203) = .227$; $\Delta R^2 = .001$; $p = .599$								

Note. For all G Tables * $p < .05$ ** $p < .01$

APPENDIX H

THE COMPUTED REGRESSION EQUATIONS GIVEN THE FINDING OF MODERATION OF ADVERTISEMENT INVOLVEMENT AS MEASURED ON THE PLEASURE DIMENSION OF THE REVISED PERSONAL INVOLVEMENT INVENTORY (RPII) AND FASHION INVOLVEMENT (FI) AS MEASURED BY THE FASHION INVOLVEMENT INDEX (FII) ON AGE

Given the significant results of the moderation of involvement with an advertisement on fashion involvement on levels of age, Equation 1 can be rewritten as Equations H-1, H-2, H-3, H-4 and H-5.

Interaction equation

$$\hat{Y} = B_1 D_1 + B_2 D_2 + B_3 FI + B_4 (D_1 \text{ X } FI) + B_5 (D_2 \text{ X } FI) + B_0 \quad (1)$$

$$\hat{Y} = (.431)(D_1) + (-1.206)(D_2) + (.497)(FI) + (.742)(D_1)(FI) + (-.832)(D_2)(FI) + (19.642) \quad (H\text{-}1)$$

Simple regression equations

Age group 21-40: where $D_1 = 0$ and $D_2 = 0$

$$\text{then } \hat{Y} = B_3 FI + B_0 \quad (2)$$

$$\hat{Y} = (.497)(FI) + (19.642) \quad (H\text{-}2)$$

Age group 41-60: where $D_1 = 1$ and $D_2 = 0$

$$\text{then } \hat{Y} = B_1 (1) + B_3 FI + B_4 FI + B_0 \quad (3)$$

$$= (B_1 + B_0) + (B_3 + B_4) FI$$

$$= (.431 + 19.642) + (.497 + .742)(FI)$$

$$= (20.073) + (1.239)(FI) \quad (H\text{-}3)$$

Age group 61-over: where $D_1 = 0$ and $D_2 = 1$

$$\text{then } \hat{Y} = B_2 (1) + B_3 FI + B_5 FI + B_0 \quad (4)$$

$$= (B_2 + B_0) + (B_3 + B_5) FI$$

$$= (-1.206 + 19.642) + (.497 - .832)(FI)$$

$$= (18.436) - (.335)(FI) \qquad \text{(H-4)}$$

APPENDIX I

POST HOC ANALYSES COMPUTATIONS GIVEN THE FINDING OF MODERATION OF ADVERTISEMENT INVOLVEMENT AS MEASURED ON THE PLEASURE DIMENSION OF THE REVISED PERSONAL INVOLVEMENT INVENTORY (RPII) AND FASHION INVOLVEMENT (FI) AS MEASURED BY THE FASHION INVOLVEMENT INDEX (FII) ON AGE

Point of intersection calculation

Setting two equations equal to each other and solved for the continuous variable FI gives the point of intersection. The intersection point for the regression lines representing the age group 21-40 and age group 41-60 is given by equation I-1.

$$(.497)(FI) + (19.642) = (20.073) + (1.239)(FI)$$

$$(.497)(FI) - (1.239)(FI) = (20.073) - (19.642)$$

$$(-.742)(FI) = (.431)$$

$$FI = -.581 \qquad \text{(I-1)}$$

The intersection point for the regression lines representing the age group 21- 40 and the age group 61-over is given by equation I-2.

$$(.497)(FI) + (19.642) = (18.436) - (.335)(FI)$$

$$(.497)(FI) + (.335)(FI) = (18.436) - (19.642)$$

$$(.832)(FI) = (-1.206)$$

$$FI = -1.450 \qquad \text{(I-2)}$$

The intersection point for the regression lines representing the age group 41- 60 and the age group 61-over is given by equation I-3.

$$(20.073) + (1.239)(FI) = (18.436) - (.335)(FI)$$

$$(1.239)(FI) + (.335)(FI) = (18.436) - (20.073)$$

$$(1.574)(FI) = (-1.637)$$

$$FI = -1.040 \qquad \text{(I-3)}$$

Testing simple slopes within groups

In order to test the simple slopes for all the levels of age, the two other levels of age were coded as the comparison groups and entered into two additional multiple regression analyses. The results of these analyses are shown in Tables I-1.

Table I-1. **Additional multiple regression results to test the simple slopes within groups**

Group 41 – 60 D_0	***B***	***SE***	***β***	***t***	***Sig.***	***r***	***pr***	***sr***
Main Effects								
(Constant)	20.014	.751		26.654	.000			
FI	.818	.217	.250	3.763	.000	.250	.247	.246
Age 21 - 40 D_1	-.585	1.222	-.033	-.479	.633	.024	-.032	-.031
Age 61 - over D_2	-1.013	1.465	-.048	-.692	.490	-.063	-.047	-.045
Regression *MS* = 316.938; *F* (3, 218) = 5.027; $p < .01$; $R^2 = .065$; Adjusted $R^2 = .052$ Residual *MS* = 63.049								
Full Model								
(Constant)	20.072	.743		27.001	.000			
FI	1.240	.282	.379	4.391	.000	.250	.286	.285
D1 Age 21 - 40 D_1	-.431	1.227	-.025	-.351	.726	.024	-.024	-.023
D2 Age 61 – over D_2	-1.636	1.476	-.077	-1.108	.269	-.063	-.075	-.072
FI X D1 Age 21- 40 D_1	-.742	.491	-.123	-1.512	.132	.084	-.102	-.098
FI X D2 Age 61 – over D_2	-1.575	.655	-.177	-2.405	.017	-.023	-.161	-.156
Regression *MS* = 272.595; *F* (5, 216) = 4.416; $p < .01$; $R^2 = .093$; Adjusted $R^2 = .072$ Residual *MS* = 61.725								
F (2, 216) = 3.339; $\Delta R^2 = .028$; $p < .05$**								
Group 61 – over D_0	***B***	***SE***	***β***	***t***	***Sig.***	***r***	***pr***	***sr***
Main Effects								
(Constant)	19.001	1.260		15.080	.000			
FI	.818	.217	.250	3.763	.000	.250	.247	.246
Age 21- 40 D_1	.428	1.594	.024	.269	.788	.024	.018	.018
D2 Age 41- 60 D_2	1.013	1.465	.062	.692	.490	.026	.047	.045
Regression *MS* = 316.938; *F* (3, 218) = 5.027; $p < .01$; $R^2 = .065$; Adjusted $R^2 = .052$ Residual *MS* = 63.049								
Full Model								
(Constant)	18.436	1.276		14.454	.000			
FI	-.335	.591	-.102	-.567	.571	.250	-.039	-.037
D1 Age 21- 40 D_1	1.206	1.606	.069	.751	.454	.024	.051	.049
D2 Age 41 – 60 D_2	1.636	1.476	.101	1.108	.269	.026	.075	.072
FI X D1 Age 21- 30 D_1	.832	.714	.138	1.165	.245	.084	.079	.076
FI X D2 Age 41 – 60 D_2	1.575	.655	.362	2.405	.017	.283	.161	.156
Regression *MS* = 272.595; *F* (5, 216) = 4.416; $p < .01$; $R^2 = .093$; Adjusted $R^2 = .072$ Residual *MS* = 61.725								
F (2, 216) = 3.339; $\Delta R^2 = .028$; $p < .05$**								

* $p < .05$ ** $p < .01$

Using the information from the Tables G-20 and I-1 the following regression equations can be written as,

Age group 21- 40 in Table G-20 is the comparison group:

then $\hat{Y} = B_3 FI + B_0$ (2)

$= (.497)(FI) + 19.642$ (I-4)

and the test for the simple slope B_3 is given by $t = 1.239$, $p = .217$

Age group 41-60 in Table I-1 is the comparison group:

then $\hat{Y} = B_3 FI + B_0$ (2)

$= (1.240)(FI) + 20.072$ (I-5)

and the test for the simple slope B_3 is given by $t = 4.391$, $p < .001$

Age group 61-over in Table I-1 is the comparison group:

then $\hat{Y} = B_3 FI + B_0$ (2)

$= (-.335)(FI) + 18.436$ (I-6)

and the test for the simple slope B_3 is given by $t = -.567$, $p = .571$

The review of this information is necessary to evaluate whether the test of significance of the simple slopes given by the t of b_3 for the different age groups each differs from zero. In this study, only the simple slope provided by the age group 41 to 60 was significant, thus it differed from zero.

VITA

On December 22, 1994, Monica Santaella received her bachelor of science degree in marketing from Louisiana State University. The next year, on May 19, 1995, she received a bachelor of science degree in management with a concentration in entrepreneurship from the same institution. Upon graduation, Monica was awarded a full scholarship to pursue graduate studies at Louisiana State University where she earned not only a master of science degree in marketing and graduated on August 6, 1998, but also a master of mass communication on August 19, 2001. At Louisiana State University, Monica also held a Graduate Assistantship. This privilege allowed her to collaborate on a wide array of projects. The completion of the requirements for doctor of philosophy in human ecology at Louisiana State University marks an important stepping-stone in Monica's future endeavors.