REFERENCE GROUPS AND SELF-BRAND CONNECTIONS FOR APPAREL PRODUCTS

by

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ABSTRACT

This study focused on self-brand connections for the apparel product category by extending previous research on self-brand connections. The purpose of this study was to examine the relationship between reference groups (in-groups vs. out-groups) and self-brand connections, the influential role of self-brand connections on apparel brand attitudes, and brand image perceptions of design, prestige, and workmanship. The moderating role of apparel product involvement, and self-construal on the relationship between self-brand connections and perceptions of brand images were also examined. The results revealed that self-brand connections with in-group/out-group brands are closely related to consumers' favorable/unfavorable brand attitudes. In addition, the findings showed that individuals' apparel product involvement does not moderate the relationship between self-brand connections and brand image perceptions. Only independent self-construal had a moderating effect on the degree of self-brand connections concerning design image perception. Overall, the findings in this study indicate that consumer responses toward apparel brands (e.g., brand attitudes, brand image perceptions) can vary according to self-brand connections with different type of reference groups. In addition, the design aspect of the brand image was found to be very critical in one's self-expression of uniqueness. The influential role of reference groups on consumers' apparel brand preferences is highlighted in this study with special marketing implications for apparel companies.

Chapter 1

INTRODUCTION

Over the past two decades, studies in psychology and consumer behavior have focused on brand associations in relation to self-concept. Brand associations refer to "anything linked in memory to a brand" (Aaker, 1991, p. 109) and self concept is defined as the "totality of the individual's thoughts and feelings having reference to oneself as an object" (Rosenberg, 1979, p. 7). Brand purchase behavior is closely linked to a desire to express one's self-identity through specific brands. Consumers utilize particular brands to construct and maintain their self-concept and/or fulfill self-expressive needs. Self-brand connection refers to when an individual associates the symbolic meanings of brands with their self-concept in order to maintain and enhance one's current self-concept (i.e., self-verification) or desired self-concept (i.e., self-enhancement) (Escalas & Bettman, 2003).

Empirical evidence is found in the literature of the influential role of reference groups on individuals' self-brand connections (Escalas & Bettman, 2005; White & Dahl, 2007). Reference groups influence consumers' evaluations of beliefs and values about the world (Escalas & Bettman, 2005). Researchers have suggested that specific reference groups contribute to individuals' development of self-brand connections (e.g., Escalas & Bettman, 2005). Escalas and Bettman (2005) proposed that in-groups influence an individual's favorable self-brand connections whereas out-groups weaken the strength of self-brand connections. Further, White and Dahl (2007) acknowledge the importance of dissociative groups in consumers' unfavorable self-

brand connections and brand evaluations. Because reference groups influence not only personal attitude, normative beliefs but also self-development (Bearden & Etzel, 1982), certain symbolic meanings associated with brands which are congruent with an image of a reference group may be adopted or rejected by individual members (Escalas & Bettman, 2005).

The current study examines reference group influences on self-brand connections for apparel products. Escalas and Bettman (2005) suggest that the strength of symbolic meanings of brands can moderate the level of self-brand connections. That is, the brands associated with stronger symbolic meanings more elevate the level of self-brand connections (e.g., Polo for Yuppies). Apparel products are widely considered to convey strong symbolic meanings for consumers (Kaiser, 1990; Solomon, 1983). Apparel products facilitate interaction between an individual and others through non-verbal communication of one's self concept and personal identity, social status, and cultural values (Kaiser, 1990). Generally, people are likely to consider group members as referents when they use and purchase apparel products (Kaiser, 1990). Reference groups may have strong influence on consumers' apparel brand choices and preferences. Accordingly, further investigation concerning the influential role of reference groups on self-brand connections for apparel products would enhance understanding of consumer behavior concerning apparel brands.

The purpose of this study is to examine the influential role of reference groups on self-brand connections, consequences of self-brand connections (apparel brand attitudes, and perceptions of brand image characteristics), and moderating effects of other variables (apparel product involvement, and self-construal) on the relationship between self-brand connections and consumer brand image perceptions for apparel products. This study builds on prior works by Escalas and Bettman (2005)

and White and Dahl (2007). First, this study investigated the influences of two types of reference groups (in-group and out-group) on self-brand connections for apparel products, the influential role of self-brand connections on consumer brand attitudes, and how the level of perceived disassociation with out-groups impact self-brand connections for apparel products. Second, this study examined the influential role of self-brand connections on perceptions of brand image characteristics (design, prestige, and workmanship). Third, this study explored the relationship between self-brand connections in conjunction with other variables (apparel product involvement, and self-construal) which are hypothesized to influence the self-brand connections for apparel brands.

1.1 Definitions of terms

Self-brand connections: Associations between individuals' self-concept and brand meanings (Escalas & Bettman, 2005).

Reference group: A group which provides guidance for people to make evaluations about themselves (i.e., attitudes, values, and behaviors) (Thompson & Hickey, 2005).

> *In-group*: A reference group in which an individual considered himself/herself to be a member or a typical person of the group (Escalas & Bettman, 2005).
>
> *Out-group*: A reference group in which an individual does not fit (Escalas & Bettman, 2005).
>
> *Dissociative group*: A reference group in which "an individual wishes to avoid being associated with and feels a sense of disidentification" (White & Dahl, 2007, p. 525).

Brand image: Perceptions of a brand formed through consumer interpretation which may be reasoned or emotional (Dobni & Zinkhan, 1990).

Apparel product involvement: The perceived relevance of apparel products based on inherent needs, values, and interests (Zaichkowsky, 1985).

Self-construal: An individual's thoughts, feelings, and behaviors of him or herself in relations to others (Markus & Kitayama, 1991; Singelis, 1994).

1.2 Thesis organization

In Chapter 1, the background for this research and purpose of the study are presented. Chapter 2 provides the theoretical framework for self-brand connections. In addition, hypotheses formulated for the current study are presented and main variables are discussed. Chapter 3 provides an explanation of data collection procedures and instrument development. Chapter 4 reports the results including hypotheses testing. Chapter 5 presents a summary of the study, implications based on results of the current study and suggestions for future studies. Finally appendices provide additional materials including the data collection instrument and human subject's documentation.

Chapter 2

STUDY BACKGROUND AND HYPOTHESES DEVELOPMENT

2.1 Theoretical framework

Researchers in various disciplines such as consumer behavior, marketing and psychology have studied how consumers use the symbolic meanings of brands/products to define, maintain, and enhance their self-concept (e.g., Levy, 1959; Sirgy, 1982; Solomon, 1983). Self-concept refers to "a person's perception of his own abilities, limitations, appearance, and characteristics, including his own personality" (Graeff, 1996, p. 481). Brewer and Gardner (1996) describe self-concept as "the person's sense of unique identity differentiated from others" (p. 83). Generally, people choose a brand that is similar to or consistent with their own self-image (e.g., Graeff, 1996). Through symbolic meanings, products/brands provide ways for an individual to express oneself and enable individuals to interact with others in a social context. The image congruence between product/brand and self-concept influences an individual's product/brand attitude and evaluation (e.g., Graeff, 1996; White & Dahl, 2007). A brand image, commonly conveyed in advertisements, offers clues to the specific type of consumer groups. For example, the Abercrombie and Fitch brand appeals to young consumer group through youthful and sexual images.

Self-concept has been commonly studied in product/brand research (Birdwell, 1968; Dolich, 1969; Escalas & Bettman, 2005). According to the self-congruity theory, individuals have favorable brand attitudes when the product or brand's image is congruent with one's actual or ideal self (Dolich, 1969; Sirgy, 1982).

Levy (1959) first highlighted the importance of self-concept in consumer behavior by stating that people purchase a particular product because of its symbolic meanings in addition to its functional aspects. Since then, many researchers studied the congruity between self-concept and product/brand and how it influences brand attitudes and preferences. Birdwell's (1968) empirical testing with automobile brands reported that an owner's brand perception toward various automobile brands could be differentiated by how much the owners felt congruity between himself and various automobile brands. Dolich (1969) documented similar results in that greater congruity was shown between consumers' self-image and their most-preferred brand compared to their least-preferred brand across various product categories. Sirgy (1982), who developed the self-image/product-image congruity theory, noted that a product image not only helps develop a person's self-concept but also enhances one's self-esteem and product usage when it has high symbolic value. Martin and Bellizzi (1982) also confirmed that consumers commonly desire or purchase products (or brands) when the products reflect concepts similar to their own self-image whereas they avoid products which are dissimilar.

In McCracken's (1986) theory of meaning movement, the author illustrated the relationship between an individual and consumer goods whereby consumers learn cultural meanings around the world through consumer goods such as "clothing, transportation, food, housing exteriors and interiors, and adornment" (p. 78). These cultural meanings can be transferred by diverse media such as advertising, the fashion system, and consumer rituals. On the basis of this assumption, Escalas and Bettman (2005) proposed that brand meanings can be transferred to an individual from reference groups. They placed emphasis on the role of reference groups in explaining individuals' brand connections in relation to self-concept. Their findings showed that

the image congruence between a brand and reference groups are important to the development of positive psychological links consumers build with such brands which is referred to as self-brand connections. In addition, the connections were stronger as each brand possessed more symbolic meanings such as in the case of self-brand connections for apparel products.

2.2 Self-brand connections, reference groups, and brand attitudes

Self-brand connections can be influenced in various ways such as through product advertisements (Escalas, 2004), celebrity endorsers (McCracken, 1986), and reference groups (Escalas & Bettman 2005). Reference groups are one of the most influential factors for creating self-brand connections. A strong literature base shows that an individual's attitude and behavior are influenced by reference groups (Moschis, 1976; Orth & Kahl, 2008; Turner, 1991; White & Dahl, 2006). Reference group, a term initially coined by Hyman (1942), serves as a source of information for consumers (Moschis, 1976), provides guidance for thoughts, attitude and behavior formation (Bearden & Etzel, 1982; White & Dahl, 2007), and influences an individual's self-esteem (Solomon & Rabolt, 2004). By belonging to a certain group, individual members learn social norms (Bearden, Netemeyer, & Teel, 1989; White, Hogg, & Terry, 2002). In addition, people understand how to use brands and develop personal brand preferences through group members (Bearden & Etzel, 1982; Childers & Rao, 1992; Escalas & Bettman, 2005; Moschis, 1976). An individual creates favorable associations with the brands which are commonly used by reference group members. Orth and Kahl (2008) stated that reference groups influence brand choice by offering insight into the brand's functional, economic, emotional, and social benefits. For those reasons, reference groups influence an individual's brand

consumption such as formation of self-brand connections and brand evaluations (Escalas & Bettman, 2005; White & Dahl, 2007).

The psychological distance between the individual and certain reference groups has influence on self-brand connections and brand attitudes. Researchers have suggested that the influence of reference groups on self-brand connections and consumers' brand attitudes are not identical (Escalas & Bettman, 2005; White & Dahl, 2007). In terms of self-brand connections, two types of reference groups, in-groups versus out-groups, were distinguished by Escalas and Bettman (2005). The normative influence from an in-group can provide individual members with psychological feelings of affiliation. Self-brand connections can be processed through the transference of symbolic brand meanings from in-groups to individual members (Escalas & Bettman, 2005). By belonging to an in-group, individual members share certain meanings with others, and evaluate themselves through comparison with in-group members. An individual's susceptibility toward normative influences results in formation of personal images to be in sync with the groups' opinion and expectation (Orth & Kahl, 2008). An in-group stereotype can be recognized by individual members, thus, the favorable self-connections can be created with in-group brands. For example, in an experimental study with college students, Escalas and Bettman (2005) found that participants were likely to create favorable self-brand connections when the brands were consistent with their in-group image. On the other hand, participants displayed lower self-brand connections with brands that matched out-groups. Findings show that people do not want the brand meanings embraced by out-groups to be transferred to themselves. For example, when an individual's out-group is a fraternity, the person would avoid wearing Polo which symbolizes the fraternity's identity (Escalas & Bettman, 2005).

Individual's psychological linkage between an individual and certain reference groups can vary according to the influence of self-brand connections and brand attitudes. In terms of out-group influences on consumers, White and Dahl (2006) examined the unfavorable effects of dissociative groups on product/brand usage. The dissociative group, which is a specific type of out-group, is a group with which individuals avoid being associated. According to White and Dahl (2006), this group negatively influences product evaluations and preferences because of concerns related to self-presentation. For example, White and Dahl (2006) found male participants were less likely to choose steaks labeled as ladies' cut than others (e.g., chef's cut and house cut). In another study, White and Dahl (2007) studied the difference between dissociative group and general out-groups by examining three different types of reference groups (e.g., in-groups, out-groups, and dissociative groups). White and Dahl (2007) proposed that out-groups should be clearly distinguished and all out-groups cannot be the same. White and Dahl (2007) explain that

> it is necessary to differentiate dissociative reference groups from out-groups more generally because, while there are surely many out-groups that people are not concerned about (e.g., I am not a soccer player, but the group does not have motivational implications for me) and aspire to be members of (e.g., I am not a model, but I wish I were), dissociative groups are out-groups people are motivated to avoid being associated with (e.g., I am not a Goth and I wish to avoid being associated with that group.) Thus, we believe that, rather than examining out-groups more generally, it is more telling to examine the effects of specific types of out-groups (p. 526)

Their findings suggested that only the dissociative reference groups had significantly unfavorable effects on self-brand connections whereas there was little difference in how consumers responded to out-group brands versus neutral brands. Further, self-brand connections can be related to favorable/unfavorable brand attitudes and the

brand attitudes can vary according to the reference group types. White and Dahl (2007) documented that participants positively evaluated in-group brands compared to brands of out-groups or dissociative groups. Conversely, the most negative evaluations were exhibited toward brands associated with dissociative groups. Thus, a relationship may exist between an individual's degree of self-brand connections and one's apparel brand attitudes.

This study expands on the previously mentioned studies related to reference groups and self-brand connections (Escalas & Bettman, 2005; White & Dahl, 2007). Similar to previous studies, the current study incorporates two types of reference groups, in-groups and out-groups, and examines self-brand connections and brand attitudes in relation to reference groups. However, this study focuses exclusively on apparel brands and assumes that self-brand connections for apparel products can be differentiated according to the degree of individual's personal associations with the reference groups. In addition, to examine the distinguishable aspect of dissociative groups from general out-groups (the difference between out-group and dissociative group), the concept of "perceived disassociation with the out-group" is incorporated to gain better understanding of a consumers' relationship with out-groups and its effects on brand attitudes. As such, the following hypotheses were developed:

H1a: Self-brand connections for in-group apparel brands will be higher than self-brand connections for out-group apparel brands.

H1b: Self-brand connections for both in-group and out-group apparel brands will be related to brand attitudes.

H1c: Perceived disassociation with an out-group will moderate the relationship between self-brand connections with out-groups and attitudes toward the out-group brands.

2.3 Self-brand connections and perceptions of brand image characteristics

Brand image is a critical dimension that influences consumer judgments concerning whether to purchase a brand. Brand image is an overall impression of a brand which is "largely a subjective and perceptual phenomenon that is formed through consumer interpretation, whether reasoned or emotional" (Dobni & Zinkhan, 1990, p. 118). Keller (1993) described brand image as "perceptions about a brand as reflected by the brand associations held in memory" (p. 3). A brand image is a central concept, which is representative of a brand's unique identity, and plays a main role in differentiating the brand from competitors. Brand image can be delivered to consumers by many sources (e.g., other consumers and advertisement) (Herzog, 1963) whereby functional or non-functional information concerning the product or service is conveyed (Parker, 2009; Patterson, 1999). Because consumption experiences are influenced by brand image (Patterson, 1999), examining how consumers perceive a brand image is very critical.

The current study proposed that self-brand connections in relation to reference groups influence consumers' brand image perceptions. Due to potential impacts of reference groups on individual's formation of attitude and behavior, the brand image delivered by in-groups can be a criterion for consumers' self-expression of "who they are, what they are, where they are, and how they want to be viewed" (Graeff, 1996, p. 482). As presented earlier, consumers' positive in-group brand evaluations results from their favorable self-brand connections with in-group brands (White & Dahl, 2007). In general, consumers' subjective perceptions about brand images depend on their brand associations. It seems likely that if an individual feels particular brands can enhance his/her self-concept, the overall impression about brand image will be favorable. Thus, the current study attempted to examine the relationship

between self-brand connections and brand image perceptions based on the assumption that people perceive in-group brands more positively than out-group brands.

Newman (1957) illustrated that brand image, which conveys symbolic values of products, includes multi-dimensions such as functional, economic, social, and psychological. Park, Jaworski, and MacInnis (1986) stated that brand image contains a "mixture of symbolic, functional and experiential benefits" (p. 136). Freidmann (1986) also suggested that the psychological meaning associated with a product can be perceived by its attributes. Because brand image consists of various aspects such as functional or non-functional attributes (Parker, 2009; Patterson, 1999), symbolic values, and consumption experiences (Patterson, 1999), perceptions of brand image should be carefully measured by considering its multi-facets (e.g., product attributes, symbolic values).

In order to measure consumers' brand image perceptions, this study employed a new scale for apparel studies developed by Shin, Kim, and Lennon (2010) based on Roth and Romeo's (1992) country image scale. Roth and Romeo (1992) developed product image dimensions identifying factors most frequently involved in measuring product image based on country-of-origin factors. Roth and Romeo (1992) viewed product image as a multi-dimensional construct based on four product characteristics: 1) innovativeness, 2) design, 3) prestige, and 4) workmanship. Innovativeness refers to use of new technology and engineering advances. Design represents products' appearance, style, colors, and variety. Prestige consists of exclusivity, status, and brand name reputation. Workmanship includes reliability, durability, craftsmanship, manufacturing, and quality. Shin, Kim, and Lennon (2010) first adapted Roth and Romeo's (1992) product image scale to measure country-of-origin images for apparel brands. Although their study is still ongoing and the validity

and reliability for these measures have not yet been published, this scale was considered to be appropriate for the study to test concurrently with the original researchers that developed the scale. Each dimension can be commonly seen in other studies related to apparel products (e.g., Delong, Bao, Wu, Chao, & Li, 2004; Eckman, Damhorst, & Kadolph, 1990) and brand research (e.g., Back, Kim, & Yu, 2010). For example, Eckman, Damhorst, and Kadolph (1990) found styling, color/pattern, fit, fabric, appearance, and price to be important evaluative criteria for apparel consumers. Eckman, Damhorst, and Kadolph (1990) also reported that a set of aesthetic criteria of style, color and pattern, fabric, and appearance to have strong impact on apparel purchase behavior. In addition, Baek, Kim, and Yu (2010) showed brand prestige to influence consumers' purchase intentions. Generally, prestige is regarded as a dimension which strongly motivates consumers' social self-identity, thus, it may be closely related to one's self-brand connections. Moreover, Delong, Bao, Wu, Chao, and Li (2004) stated that consumers perceive a branded apparel product as being of high quality. Given these findings, the three dimensions (design, prestige, and workmanship) are appropriate to measure brand image perceptions for apparel brands.

For this study, three dimensions of design, prestige, and workmanship were used to measure apparel brand image perceptions. The three dimensions of design, prestige, and workmanship may be important in brand perceptions due to one's self-expression needs. Thus, this study examines the relationship between self-brand connections associated with reference groups and consumer perceptions toward brand image characteristics with the following hypotheses:

> H2a: Participants will report more positive perceptions of brand image characteristics (design, prestige, and workmanship) for apparel brands associated with in-groups compared to brands associated with out-groups.

H2b: Self brand connections with in-group brands will be positively related to perceptions of brand image characteristics (design, prestige, and workmanship) for in-group brands.

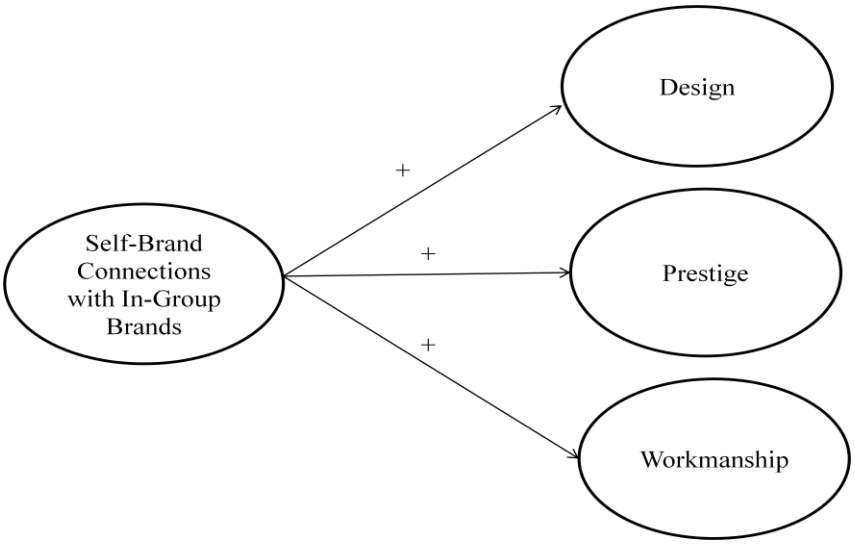

Figure 2.1 Illustration of Hypothesis 2b

2.4 Self-brand connections and apparel product involvement

Several definitions of product involvement exist in the literature. Zaichkowsky (1985) defines product involvement as "a person's perceived relevance of the object based on inherent needs, values, and interests" (Zaichkowsky, 1985, p. 342). Bloch (1986) describes product involvement as "an unobservable state reflecting the amount of interest, arousal, or emotional attachment a consumer has with a product" (p. 52). Furthermore, Laaksonen (1994) explains "the degree to which consumers are involved in different aspects of the consumption process, such as

products, advertisements, and the act of purchasing, has grown to be regarded as one of the central determinants of consumer behavior" (p. 1).

Product involvement has been studied as a substantial dimension that influences apparel product consumption (Bloch, 1986; Kapferer & Laurant, 1985/1986; Kim, Damhorst, & Lee, 2002). Kim, Damhorst, and Lee (2002) stated that apparel products are highly relevant to "unique combinations of involvement dimensions that drive consumer responses to apparel" (p. 279). Consumers' apparel purchase attitudes and behaviors can vary according to individuals' level of apparel product involvement, the degree to which an individual has psychological ties and interests with apparel products. For example, people with higher apparel involvement would have higher interest in information search (Jin & Goh, 1999) and advertising related to apparel products (Kim, Damhorst, & Lee, 2002).

An individual's apparel product involvement may lead consumers to express their self-concept or personality through apparel products. The close relationship between apparel product involvement and self-concept (or self-identity) has been suggested by researchers (Dolich, 1969; Laaksonen, 1994; Lee, 2000). In order to express their self-concept, consumers who are more interested in apparel products may actively search and use appropriate apparel brands more frequently. On the other hand, people with low apparel product involvement may be less focused on the symbolic aspects of apparel products and put emphasis on other aspects of apparel products, such as, functional compared to value-expressive. Thus, apparel product involvement may determine the strength of self-brand connections.

Apparel product involvement may be closely related to self-brand connections associated with reference groups. Lee (1990) suggested that people tend to utilize product visibility to symbolically communicate their relationship with others;

apparel products are widely used for non-verbal communication due to strong symbolic characteristics. Lee (2000) described that apparel product meanings are "closely related to consumers "ego" perception and includes consumers' perception of significant others and consumers' self-enhancement resulting from wearing apparel products" (p. 16). People adopt similar clothing styles used by others in the same group to express conformity values (McCracken, 1986). For example, Workman and Johnson (1993) found that individuals were more likely to feel a sense of affiliation by choosing similar product/brand usage associated with their reference groups. Thus, if individuals are highly involved in apparel products, there should be higher tendencies to create self-brand connections with in-group brands in order to achieve a sense of belonging as well as to express their self-concept. In turn, the in-group brands can be favorably perceived based on the degree of self-brand connections. Conversely, people, who are less involved in apparel products, would have weaker associations between their self-connections and their brand image perceptions. To these people, either the type of apparel brands (in-group brands or out-group brands) or the concerns about whether the apparel brands can satisfy their self-expression may be less important. Thus, this study examines how apparel product involvement moderates the relationship between self-brand connections for in-group/out-group apparel brands and perceptions toward brand image characteristics with the following hypothesis:

> H3: Apparel involvement will have a positive moderating effect on the relationship between participants' self-brand connections and their perceptions of brand image characteristics for both in-group apparel and out-group brands.

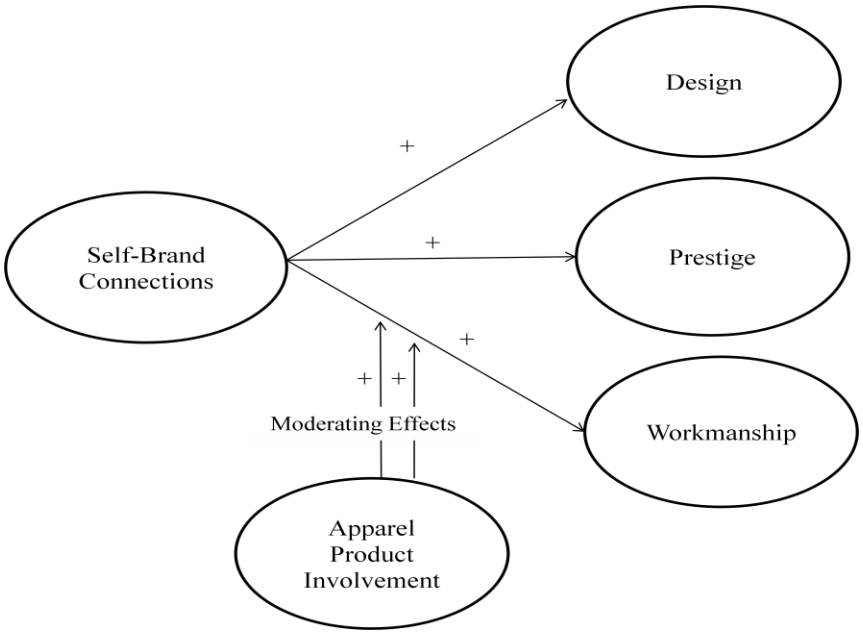

Figure 2.2 Illustration of Hypothesis 3 for Both In-Group and Out-Group Brands

2.5 Self-brand connections and self-construal

Self-construal refers to "a constellation of thoughts, feelings and actions concerning one's relationship to others, and the self as distinct from others" (Singelis, 1994, p. 581). Self-construal indicates how individuals view the relationship between themselves and others in a social context (Markus & Kitayama, 1991; Singelis, 1994). Markus and Kitayama (1991) proposed that people hold two dimensions of self-construal: independent and interdependent. Independent self-construal refers to a "bounded, unitary, stable self that is separate from social context" (p. 581). Individuals with an independent orientation pursue intrinsic and private achievement goals, focus on internal attributes, and express unique aspects of their own self. These

people are autonomous and consider themselves to be distinct from others. On the contrary, interdependent self-construal can be described as a malleable self that can be changed depending on diverse situations (Singelis, 1994). A person with interdependent self-construal does not think themselves separate from their social contexts and are likely to closely link with others. They are motivated from others to define themselves; this tendency is totally different from an independent person who tends to place importance on one's individuality and uniqueness. To the interdependent individuals, maintaining harmony with others and pursuing social goals related to the public dimensions "such as statuses, roles, and relationships" (Singelis, 1994, p. 581) are essential. The interdependent self-construal's thoughts and behaviors are regulated by their social context (Singelis, 1994). Because interdependent self-construal is closely associated with conformity to a society, this view of self-construal would be more sensitive toward public opinions and interpersonal relationships with others than the independent construal of the self.

Self-construal has been widely used to examine cultural differences in consumer behavior in terms of brand attitudes (Polycrat & Alden, 2005), shopping motives (Wajda, Hu, & Cui, 2007), luxury consumption (Wong & Ahuvia, 1998), and self-brand connections (Escalas & Bettman, 2005). Independent and interdependent self-construal in consumer behavior have been considered as representative of the Western (Individualistic) and Asian (Collectivistic) culture, respectively. Consumers belonging to an individualistic country such as the United States have been known to have strong independent self-construal whereas people from Japanese culture strongly hold interdependent self-construal (Markus & Kitayama, 1991). But scholars (Markus & Kitayama, 1991; Singelis, 1994) view the two aspects of self-construals to exist concurrently within an individual. Individuals' consumption behavior can vary by

their primary self-construal which affects their ways of accepting social influence (e.g., culture norms, values, and beliefs), goal achievements, and relationship with others. For example, Kim and Kean (2009) found that Korean consumers' purchase decision-making styles were positively related to both interdependent and independent self-construal. Although Asians have long been considered more interdependent than Western people, the results showed that Korean college students' independent self-construal were as high as their interdependent self-construal. In addition, they found the differences in purchase decision making styles between the two self-construal types; the participants with higher independent self-construal were more likely to purchase clothing products of high quality, novelty and to be less price-conscious than those with higher interdependent self-construal.

Self-construal also has been studied in relation to self-brand connections. Escalas and Bettman (2005) found that both interdependent and independent self-construal consumer groups create stronger self-brand connections with in-group brands compared to brands not matching their in-group. Interestingly, people of high independent self-construal had stronger negative self-brand connections with out-group brands compared to interdependent consumers (Escalas & Bettman, 2005) although it has been noted that the interdependents tend to exhibit stronger conformity toward group behavior. Escalas and Bettman (2005) provide some explanations that the stronger negative self-brand connections by the primary independent self-construal, may arise from the independents' characteristics of uniqueness and individuality. In other words, when the independent self-construal becomes salient, people do not want to detract from their own self-concept by others from outside (i.e., out-group members) so that the negative self-brand connections with out-group brands can be created. On the other hands, the interdependent people create less negative self-brand connections

(Escalas & Bettman, 2005) which may be due to the interdependent person's focus on interpersonal relationship and their adjustments to others (i.e., out-group members). Accordingly, the current study examined how the self-construal construct moderates the relationship between self-brand connections and perceptions of brand image proposed in Hypothesis 2b. This study predicts that both types of self construal will influence the relationship between self-brand connections and brand image perceptions for in-group brands. In addition, based on Escalas and Bettman's (2005) findings, this study hypothesized that independent self-construal's moderating effect on the relationship between self-brand connections and brand image perceptions for out-group brands to be stronger compared to the interdependent self-construal's effect. Thus, this study developed the following hypothesis for determining how one's level of self-construal can vary the relationship between self-brand connections and perceptions of brand image:

H4a: Both independent and interdependent self-construal will have a positive moderating effect on the relationship between participants' self-brand connections and their perceptions of brand image characteristics (design, prestige, and workmanship) for in-group brands.

H4b: Both interdependent and independent self-construal will have a positive moderating effect on the relationship between participants' self-brand connections and their perceptions of brand image characteristics (design, prestige, and workmanship) for out-group apparel brands. In addition, independent self-construal will have a stronger moderating effect.

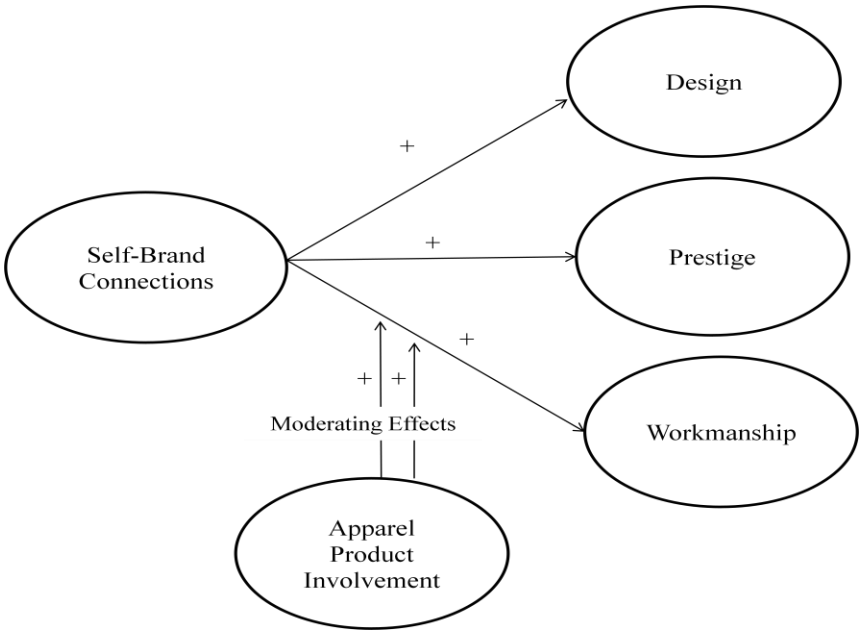

Figure 2.3 Illustration of Hypotheses 4a and 4b for Both In-Group and Out-Group Brands

Chapter 3

DATA COLLECTION AND MEASUREMENT

3.1 Data collection and procedures

An online survey was developed and administered using the software Qualtrics® . A list of 2,000 female college students enrolled in a mid-Atlantic university was randomly generated by the registrar's office at the University. Five-hundred female students from each undergraduate level, freshman to senior levels, were randomly selected. Each student received an e-mail invitation to participate in the survey with an attached link to access the survey. Two reminder e-mails were forwarded after three and seven days respectively from the time the initial invitation to participate in the survey was forwarded. All participants who completed the survey were given an opportunity to have their e-mail addresses entered into a drawing for four $25 certificates from a local coffee shop.

3.2 Measures

The data collection instrument was pretested with graduate students enrolled in a mid-Atlantic university. The researcher found that pre-test participants were not able to differentiate between out-groups versus dissociative groups and had difficulties in choosing different brand names for the two groups. Based on these results, questions related to dissociative groups were deleted. Instead, the measures focused on two reference groups (in-groups vs. out-groups) and two scales measuring the degree of association with in-groups and dissociation with out-groups were

included. Based on White and Dahl's (2007) study on dissociative reference group and self-brand connections, the scales were developed to examine whether the level of personal association with out-groups is positively related to apparel brand attitudes.

Five 7-point Likert-type scaled measures, two 7-point bipolar adjective scales, and four personal characteristic measures were included in the online survey. Also, one open-ended question was included to serve as a suspicion probe. Table 3.1 provides a summary of the study measures used in the survey. The following section provides an explanation for each measure.

In-Group and Out-Group Apparel Brand Matching. The survey included in-group and out-group brand matching measurements following procedures by Escalas and Bettman (2005) and White and Dahl (2007). Participants were asked to list a reference group to which they belong (i.e., in-group) and an in-group brand, and a reference group to which they do not belong (i.e., out-group) and an out-group brand. The following descriptions were used:

"In the box below, we would like you to type in the name of ***a group on campus that you belong to and feel a part of****. You should feel you are this type of person and that you fit in with these people. This group should be a tightly knit group, consisting of individuals who are very similar to one another,"*

"In the box below, we would like you to type in ***an apparel brand that is consistent with the group that you belong to****. This can be a brand that members of a group actually use or it can be a brand that shares the same image as the group. A brand is considered to be a name or symbol that distinguishes one seller's goods from another's,"*

"In the box below, we would like you to type in the name of ***a group on campus that you do NOT belong to and do NOT feel a part of****. You should feel you are not this*

type of person and that you do not fit in with these people. This group should be a tightly knit group, consisting of individuals who are very similar to one another," and

"In the box below, we would like you to type in an apparel brand that is consistent ***with the group that you do NOT belong to****. This can be a brand that members actually use or it can be a brand that shares the same image as the group. A brand is considered to be a name or symbol that distinguishes one seller's goods from another's."*

Degree of Association with In-Group/Out-Group. A multi-item measure was developed by the researcher to cross-check the level of association and dissociation with the named reference groups. These questions concerning the degree of personal association with each reference group were developed by the researcher based on White and Dahl's (2007) open-ended measure of dissociative groups. Afterwards, an unrelated filler task was conducted in order to "reduce potential demand effects" (Escalas & Bettman, 2005, p. 381) asking participants questions unrelated to the study.

Self-Brand Connections. The scale of self-brand connections by Escalas and Bettman (2005) was adopted. Self-brand connections were measured on nine (e.g., "This brand reflects who I am," "I can identify with this brands") 7-point Likert scales (1=strongly disagree, 7=strongly agree). In Escalas and Bettman's (2005) study, this scale produced a reliability of .96 (Cronbach's coefficient *alpha*).

Perceptions of Brand Image Characteristics. The researcher used the country-of-origin scale for apparel products developed by Shin, Kim, and Lennon based on Roth and Romeo's (1992) original country image scale. Each question was rated on a 7-point Likert scales (1=strongly disagree, 7=strongly agree).

General Brand Attitudes. Brand attitudes for in-group and out-group brands were measured by using the general evaluation scale used by White and Dahl (2007). Brand attitudes were measured on three 7-point semantic differential scales (e.g., unfavorable/favorable, dislike/like, bad/good).

Apparel Product Involvement. Product involvement for apparel products was measured using Zaichkowsky (1994)'s personal involvement inventory (PII) scale. Zaichkowsky's (1994) measure of product involvement consists of ten word pairs to measure the concept of product involvement on 7-point semantic differential scales (e.g., important/unimportant, boring/interesting). According to Zaichkowsky (1994), the Cronbach coefficient *alpha* of the personal involvement inventory (PII) scale was over .90. This measure has been widely used in marketing research (e.g., Foxall & Bhate, 1992; Kim, Damhorst, & Lee, 2002).

Self-Construal. Singelis' (1999) self-construal scale was used to measure independent and interdependent self-construal constructs. The reliability scores of the self-construal measures were relatively weak in Singelis' (1999) study with independent and interdependent self-construal producing Cronbach's coefficient *alpha* of .69, and .73. Nonetheless, these self-construal scales have been widely used in many studies (e.g., Escalas & Bettman, 2005; Kim & Kean, 2009; Piamphongsant & Mandhachitara, 2008). In this study, twenty-four items were used to measure independent and interdependent self-construal on a 7-point Likert scale (1=strongly disagree, 7=strongly agree).

Toward the end of the questionnaire, following procedures by White and Dahl (2007), a suspicion probe was conducted to check whether participants were aware of the purpose of the study and developed hypotheses. An open-ended question was developed (e.g., "what do you think was the purpose of the study?").

Finally, personal information concerning the participant's personal characteristics such as age, gender, area of study, and status at the University were measured using open-ended (e.g., area of study) and close-ended questions (e.g., age, status at the University).

Table 3.1 Summary of Measurements Used in the Online Survey

Construct	Measurement Items	Reference	Format
In-Group/Out-Group and Brand Matching	N/A	Escalas and Bettman (2005) and White and Dahl (2007)	Open-Ended Question
Level of Association with In-Group	I belong to the group/I am the type of person that would belong to the group/I fit in with the group/I like being associated with the group	White and Dahl (2007)	7–Point Likert Scale (Strongly disagree/strongly agree)
Level of Dissociation with Out-Group	I do not belong to the group/I am not the type of person that would belong to the group/I do not fit in with the group/I avoid being associated with the group	White and Dahl (2007)	7-Point Likert Scale (Strongly disagree/strongly agree)
Self-Brand Connections	This brand reflects who I am/I can identify with this group/I feel a personal connections to this brand/ I use this brand to communicate who I am to other people/I think this brand helps me become the type of person I want to be/I consider this brand to be "me" (it reflects who I consider myself to be or the way that I want to present myself to others)/This brand suits me well	Escalas and Bettman (2005) and White and Dahl (2007)	7-Point Likert Scale (Strongly disagree/strongly agree)
Perceptions of Brand Image Characteristics	To me, brand X is appealing in appearance/is appealing in style/is appealing in color/provides a variety in design to suit my needs/provides exclusivity/provides status/ has good reputation/has good craftsmanship/has good manufacturing quality/fits my body well	Roth and Romeo (1992)	7-Point Likert Scale (Strongly disagree/strongly agree)
Brand Attitudes	My feeling about brand X is (unfavorable/favorable, dislike/like, bad/good)	White and Dahl (2007)	7-Point Scale

Table 3.1 (Continued)

Construct	Measurement items	Reference	Format
Apparel Product Involvement	I think apparel products are (important/unimportant, boring/interesting, relevant/irrelevant*, exciting/unexciting*, means nothing/means a lot to me, appealing/unappealing*, fascinating/mundane*, worthless/valuable, involving/uninvolving*, not needed/needed)	Zaichkowsky (1994)	7-Point Bipolar Adjective Scale
Self-Construal	Independent: I'd rather say "No" directly, than risk being misunderstood/Speaking up during a class is not a problem for me/Having a lively imagination is important to me/I am comfortable with being singled out for praise or rewards/I am the same person at home that I am at school/Being able to take care of myself is a primary concern for me/I act the same way no matter who I am with/I feel comfortable using someone's first name soon after I meet them, even when they are much older than I am/I prefer to be direct and forthright when dealing with people I've just met/I enjoy being unique and different from others in many respects/My personal identity, independent of others, is very important to me/I value being in good health above everything Interdependent: I have respect for the authority figures with whom I interact/It is important for me to maintain harmony within my group/My happiness depends on the happiness of those around me/I would offer my seat in a bus to my professor/I respect people who are modest about themselves/I will sacrifice my self-interest for the benefit of the group I am in/I often have the feeling that my relationships with others are more important than my own accomplishments/I should take into consideration my parents' advice when making education/career plans/It is important to me to respect decisions made by the group/I will stay in a group if they need me, even when I'm not happy with the group/If my brother, sister, or close family members fail, I feel responsible/Even when I strongly disagree with group members, I avoid an argument	Singelis (1994), and Escalas and Bettman (2005)	7-Point Likert Scale (Strongly disagree/strongly agree)

*Indicates item is reverse scored.

Chapter 4

DATA ANALYSIS AND RESULTS

This chapter first discusses sample characteristics, measurement scale characteristics, descriptive statistics, factor analysis, and reliabilities. Next, paired t-test, correlation analysis, and multiple regression analysis were used to statistically test each hypothesis presented in the study. Data was analyzed using Statistical Package for the Social Sciences 18 (SPSS) for Windows.

4.1 Sample characteristics

One hundred and eighty-three students completed the survey. Of the total that participated, data from forty students were deleted due to improper responses resulting in a total of 143 completed responses. For example, participants who did not answer a specific apparel brand name for their in-group and out-group brand questions were deleted from the database. Table 4.1 presents a summary of the sample characteristics. Female college students (100%) participated in the survey. They were undergraduates (23.8% freshmen; 33.6% sophomore; 27.3% junior; 15.4% senior), and within the age ranges of 18 and 24 (99.3%).

Table 4.1 Summary of Sample Characteristics

Characteristics	Items	Frequency	Percent
Age	18	14	9.8
	19	36	25.2
	20	42	29.4
	21	36	25.2
	22	14	9.8
	29	1	0.7
Classification	Freshman	34	23.8
	Sophomore	48	33.6
	Junior	39	27.3
	Senior	22	15.4
Field of Study	Engineering	5	3.5
	Science	18	12.6
	Arts & Human	22	15.4
	Social Science	30	21.0
	Education	19	13.3
	Agriculture	7	4.9
	Business	18	12.6
	Health Science & Nursing	24	16.8
	Total	143	100.0

4.2 Measurement results

The following section explains the results concerning each measure within the study. Results testing for validity and reliability are explained in this section. Summaries of descriptive statistics for each measure are also presented.

In-Group and Out-Group Apparel Brand Matching. Table 4.2 provides a sample of twenty in-groups and out-groups entered by each participant and a brand consistent with the image of each group. Similar to previous studies (e.g., Escalas &

Bettman, 2005), the groups and brands are idiosyncratic to each participant and are not intended for analysis in this study. However, we do observe that the groups mentioned represent groups are commonly seen within a University and the brands appear to fit the young female market.

Level of Association with In-Group/Out-Group. The multi-item measure developed by researchers to cross-check the level of association and dissociation with the named reference groups showed reliabilities of .919 and .827 for in-groups and out-groups respectively. A single composite score was developed for each participant based on the items representing association and dissociation with the named reference groups. The overall mean score across the composite scores were 6.251 (SD=1.060) and 5.536 (SD=1.373) for in-groups and out-groups respectively. The mean score was slightly lower for participants' level of disassociation with out-groups, however, both mean scores were above the mid-point.

Table 4.2 Examples of Reference Groups and Brands Listed by Participants

Participant Number	In-Groups		Out-Groups	
	Group Name	Apparel Brand	Group Name	Apparel Brand
1	Kappa Alpha Theta	American Apparel	Blue Hen Ambassadors	Polo
2	Creative	American Apparel	Athletes	Nike
3	Gamma Sigma Sigma	American Apparel	Club Soccer	Nike
4	Gamma Sigma Sigma	Charlotte Russe	Anime Club	Hot Topic
5	Honors Program Students	J Crew	Student Government Association	Ralph Lauren
6	ACDA	Anthropologie	PISCES	Cole Haan
7	Gamma Sigma Sigma	American Eagle	Greek Life	Bebe
8	Average Students	Abercrombie and Fitch	Sorority	Guess
9	UD Swing Club	Aris Allen	Intervarsity Christian Fellowship	Abercrombie and Fitch
10	UD Chorale	American Eagle	Greek Life	Juicy Couture
11	Volunteer	Sofee	Sport Teams	Abercrombie and Fitch
12	UDress	American Apparel	Sorority	Polo
13	Women's Club Ultimate Frisbee Team	Forever 21	Choir	Ralph Lauren
14	Alpha Sigma Alpha	American Apparel	International Students	Abercrombie and Fitch
15	Alpha Sigma Alpha	American Apparel	Fraternities	Polo
16	Alpha Phi Sorority	J Crew	Athletic Teams	Nike
17	Rubber Chickens	American Apparel	The Athletes	Abercrombie and Fitch
18	DRDC	Carpezio	Fraternities	Polo
19	Varsity women tennis	Nike	Athletic Teams	Nike
20	Gamma Sigma Sigma	Forever 21	Sorority	Abercrombie and Fitch

Self-Brand Connections. As a unidimensional scale, reliability analyses were conducted to measure participants' self-brand connections for in-group and out-group brands. Reliability results for in-group and out-group brands were .939 and 944 respectively. Single composite mean scores were developed to represent all items for self brand connections for in-group (M=4.478, SD=1.432), and out-group (M=2.055, SD=1.126) brands.

Perceptions of Brand Image Characteristics. Factor analysis was conducted to determine the underlying dimensions for the measure. Principal components factor analysis with varimax rotation was conducted separately for items that measured consumer perceptions of brand image characteristics for in-group versus out-group apparel brands. Table 4.3 presents the results of factor analysis for in-group brands, and Table 4.4 presents factor analysis results for out-group apparel brands. Following recommendations from Hair, Anderson, Tatham, and Black (1998), statements loading greater than 0.60 on a single factor were included resulting in three brand image characteristics.

In terms of in-group apparel brands, the analysis yielded three factors (design, prestige, and workmanship) explaining for 80.806 percent of the variance. For out-group brand image characteristics, factor analysis results did not distinguish the dimensions for prestige and workmanship. Only two components loaded on the rotated matrix, (1) design and (2) prestige/workmanship, explaining for 77.987 percent of the variance. For both in-group and out-groups, an item concerning workmanship ("Fits my body well") did not show a strong loading on any one factor and was discarded. Also, although one item measuring brand prestige ("Has good reputation") loaded

strongly on the workmanship factor, we did not include this item because it did not conceptually correspond to the factor.

Based on the factor analysis results, reliabilities for items loading within each factor were measured and a single composite score representing each dimension was generated (Table 4.5). Reliability results for design, prestige, and workmanship for in-group apparel brands ranged from .863 to .971. In terms of out-group apparel brands, Cronbach's coefficient *alpha* for the design dimension was .934 and prestige/workmanship was .930. Single composite mean scores were developed to represent dimensions for perceptions of brand image characteristics. Table 4.5 shows a summary of means scores for each dimension for in-group and out-group brands. The mean scores representing brand image characteristics for the in-group brands ranged from 4.405 to 5.893 and the out-group brands ranged from 3.930 to 4.379. Communalities for all 10 items for each in-group and out-group brand exceeded 0.50.

Table 4.3 Factor Analysis for Perceptions of Brand Image Characteristics for In-Groups

Brand Image Characteristics	Loadings			Communality
	Factor 1 Design	Factor 2 Workman-ship	Factor 3 Prestige	
Is appealing in appearance (Design 1)	**.873**	.263	.107	.842
Is appealing in style (Design 2)	**.913**	.172	.099	.872
Is appealing in color (Design 3)	**.873**	.222	.145	.833
Provides a variety in design to suit my needs (Design 4)	**.632**	.285	.233	.534
Provides exclusivity (Prestige 1)	.208	.153	**.899**	.874
Provides status (Prestige 2)	.119	.208	**.908**	.882
Has good reputation (Prestige 3)	.346	.790	.244	.804
Has good craftsmanship (Workmanship 1)	.195	**.932**	.155	.931
Has good manufacturing quality (Workmanship 2)	.189	**.930**	.141	.921
Fits my body well (Workmanship 3)	.471	.593	.114	.587
Eigenvalue	5.386	1.437	1.258	
% of total variance	53.855	14.372	12.579	
Total variance	80.806			

Table 4.4 Factor Analysis for Perceptions of Brand Image Characteristics for Out-Groups

Brand Image Characteristics	Loadings		Communality
	Factor1 Design	Factor 2 Prestige and Workmanship	
Is appealing in appearance (Design 1)	**.881**	.306	.869
Is appealing in style (Design 2)	**.885**	.286	.865
Is appealing in color (Design 3)	**.861**	.285	.824
Provides a variety in design to suit my needs (Design 4)	**.794**	.294	.716
Provides exclusivity (Prestige 1)	.188	**.831**	.726
Provides status (Prestige 2)	.235	**.884**	.837
Has good reputation (Prestige 3)	.554	**.688**	.780
Has good craftsmanship (Workmanship 1)	.458	**.800**	.850
Has good manufacturing quality (Workmanship 2)	.452	**.778**	.809
Fits my body well (Workmanship 3)	.590	.417	.522
Eigenvalue	6.617	1.182	
% of total variance	66.168	11.818	
Total variance	77.987		

Brand Attitudes. As a unidimensional scale, reliability analysis was conducted to measure participants' brand attitude for in-group and out-group apparel brands. Reliability results for brand attitude toward in-groups and out-groups were .958 and .956 respectively. Single composite mean scores were developed to represent participants' attitude for in-group (M=6.249, SD=0.923) and out-group (M=3.610, SD=1.782) brands.

Apparel Product Involvement. Reliability analysis was conducted to measure participants' apparel product involvement. Reliability for apparel product involvement was .941. Single composite mean scores were developed to represent all items for apparel involvement (M=5.248, SD=1.034).

Self-Construal. Reliability analyses were conducted on measures for independent and interdependent self-construal. Reliability results for independent and interdependent self-construal were .807 and .796 respectively. Single composite mean scores were developed to represent all items for independent (M=5.088**,** SD=0.777) and interdependent (M=5.158, SD=0.746) self-construal.

Table 4.5 Reliability Results and Mean Scores for Composite Measures (N=143)

	Number of Items	Reliability	Mean (SD)	Min.	Max.
Level of Association with In-Group	4	.919	6.251 (1.060)	1.00	7.00
Level of Dissociation with Out-Group	4	.827	4.478 (1.432)	1.00	7.00
Self-Brand Connections with In-Group Brand	7	.939	5.536 (1.373)	1.00	7.00
Self-Brand Connections with Out-Group Brand	7	.944	2.055 (1.126)	1.00	7.00
Perception of Brand Image Characteristic/In-Group/Design	4	.891	5.893 (0.9)	2.00	7.00
Perception of Brand Image Characteristic/In-Group/Prestige	2	.863	4.405 (1.615)	1.00	7.00
Perception of Brand Image Characteristic/In-Group/Workmanship	2	.971	5.716 (1.169)	2.00	7.00
Perception of Brand Image Characteristic/Out-Group/Design	4	.934	3.930 (1.613)	1.00	7.00
Perception of Brand Image Characteristic/Out-Group/Prestige and Workmanship	5	.930	4.379 (1.662)	1.00	7.00
Brand Attitude/In-Group	3	.958	6.249 (0.923)	3.00	7.00
Brand Attitude/Out-Group	3	.956	3.610 (1.782)	1.00	7.00
Apparel Product Involvement	12	.941	5.248 (1.034)	1.50	7.00
Independent Self-Construal	12	.807	5.088 (0.777)	2.43	7.00
Interdependent Self-Construal	12	.796	5.158 (0.746)	2.92	7.00

4.3 Hypotheses testing

Hypothesis 1. Hypothesis 1a compares the degree of self-brand connections between in-group and out-group brands. A paired samples t-test was conducted to examine the mean scores of self-brand connections between in-group (M=5.536) and out-group (M=2.055) brands (Table 4.6). Results show a significant difference between the means (t=17.274, p=.000). Hypothesis 1a was accepted.

Table 4.6 Paired Sample t-Test for Self-Brand Connections between In-Groups and Out-Group Brands (H1a)

Self- Brand Connections	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
In-Group Brands - Out-Group Brands	2.422	1.677	.140	2.145	2.699	17.274	142	.000

Hypothesis 1b examines the relationship between self-brand connections and brand attitude for in-group and out-group brands. Correlation analysis shows a significant relationship between self-brand connections and brand attitudes for both in-group (r=.650, p=.000) out-group (r=.703. p=.000) brands. Thus, hypothesis 1b was accepted.

Hypothesis 1c examines how perceived disassociation with the out-groups moderates the relationship between self-brand connections and brand attitudes for the out-group brands. In Hypothesis 1c, multiple regression analysis was conducted with brand attitudes toward out-group brands as the dependent variable. Results showed

only one significant main effect from self-brand connections. There was no significant main effect or interaction with level of dissociation with the out-groups (Table 4.7). Thus, Hypothesis 1c was rejected.

Table 4.7 Multiple Regression Results Testing for Moderating Effects of Dissociation with Out-Groups (H1c)

Dependent Variable: Brand Attitudes for Out-Group Brands

Model		Standardized Coefficients			Change Statistics			
		Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with Out-Group Brand	.703	11.746	.000	.495	.495	137.978	.000
2	Self-Brand Connections with Out-Group Brand	.693	11.433	.000	.499	.004	1.135	.288
	Level of Dissociation with Out-Group	-.065	-1.065	.288				
3	Self-Brand Connections with Out-Group Brand	.965	3.181	.002	.502	.003	.836	.362
	Level of Dissociation with Out-Group	.043	.326	.745				
	Self-Brand Connections with Out-Group Brand X Level of Dissociation with Out-Group	-.281	-.914	.362				

Hypothesis 2. Hypothesis 2a examines how participants perceive brand image characteristics for in-group versus out-group brands. A paired sample t-test was conducted to examine the differences in mean scores for each brand image characteristic between in-group and out-group brands (Table 4.8). Although factor analysis resulted in different factor dimensions for in-group and out-group brands, for the purpose of comparing consumer response for in-group and out-group brands, the prestige/workmanship factor was separated into two separate dimensions. Results showed a significant difference in the means of brand image characteristic for design ($M_{in\text{-}groups}$=5.893, $M_{out\text{-}groups}$=3.930, t=12.689, p=.000) and workmanship ($M_{in\text{-}groups}$=5.893, $M_{out\text{-}groups}$=3.930, t=6.921, p=.000). But there was no difference between in-group and out-group brands for prestige. Thus, hypothesis 2a was partially accepted.

Table 4.8 Paired Sample t-Test for Perceptions of Brand Image Characteristics between In-Groups and Out-Group Brands (H2a)

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Design: In-Groups - Out-Groups	1.963	1.850	.154	1.657	2.269	12.689	142	.000
Prestige: In-Groups - Out-Groups	.102	2.373	.198	-.289	.494	.517	142	.606
Workmanship: In-Groups - Out-Groups	1.223	2.114	.176	.8742	1.573	6.921	142	.000

Hypothesis 2b examines whether there is a positive relationship between self-brand connections for in-group brands and perceptions of brand image characteristics (design, prestige, and workmanship). Three separate correlation analyses show significant relationships between self-brand connections and perceptions (Table 4.9): design (r=.580, p=.000), prestige (r=.402, p=.000), and workmanship (r=.302, p=000). Thus, hypothesis 2b was accepted.

Table 4.9 Correlation Analysis of Self Brand Connections and Perceptions of Brand Image Characteristics for In-Group Brands (H2b)

Variables	(1)	(2)	(3)	(4)
(1) Self-Brand Connections	-			
(2) Design	.580**	-		
(3) Prestige	.402**	.375**	-	
(4) Workmanship	.392**	.475**	.365**	-

Note: ** p<.001

Hypothesis 3. Hypothesis 3 examines the moderating effects of apparel product involvement on the relationship between self-brand connections and perceptions of brand image characteristics for in-group and out-group brands. Multiple regression analysis was conducted to test whether the level of apparel product involvement interacted with self-brand connections when predicting perceptions of brand image characteristics. For the in-group brands, results showed apparel product involvement to have only one main effect on the brand image dimension of design (β=.155, p<.05) (Table 4.10). But there was no moderating effect on the relationship between self-brand connections and perceptions of brand image characteristics. For out-group brands, apparel involvement is not related to perceptions of brand image characteristics. Thus, hypothesis 3 was rejected.

Table 4.10 Multiple Regression Results Testing for the Moderating Effects of Apparel Product Involvement for In-Group Brands (H3)

Dependent Variable: Perception of Brand Image Characteristic/Design

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with In-Group Brands	.580	8.453	.000	.336	.336	71.452	.000
2	Self-Brand Connections with In-Group Brands	.522	7.127	.000	.357	.021	4.475	.036
	Apparel Product Involvement	.155	2.115	.036				
3	Self-Brand Connections with In-Group Brands	.755	2.406	.017	.360	.003	.586	.445
	Apparel Product Involvement	.288	1.528	.129				
	Self-Brand Connections with In-Group Brands X Apparel Product Involvement	-.314	-.766	.445				

Table 4.11 Multiple Regression Results Testing for the Moderating Effects of Apparel Product Involvement for In-Group Brands (H3)

Dependent Variable: Perception of Brand Image Characteristic/Prestige

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with In-Group Brands	.402	5.216	.000	.162	.162	27.205	.000
2	Self-Brand Connections with In-Group Brands	.364	4.377	.000	.171	.009	1.503	.222
	Apparel Product Involvement	.102	1.226	.222				
3	Self-Brand Connections with In-Group Brands	-.249	-.705	.482	.189	.019	3.182	.077
	Apparel Product Involvement	-.246	-1.162	.247				
	Self-Brand Connections with In-Group Brands X Apparel Product Involvement	.822	1.784	.077				

Table 4.12 Multiple Regression Results Testing for the Moderating Effects of Apparel Product Involvement for In-Group Brands (H3)

Dependent Variable: Perception of Brand Image Characteristic/Workmanship

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with In-Group Brands	.392	5.065	.000	.154	.154	25.655	.000
2	Self-Brand Connections with In-Group Brands	.345	4.140	.000	.168	.014	2.309	.131
	Apparel Product Involvement	.127	1.520	.131				
3	Self-Brand Connections with In-Group Brands	.398	1.112	.268	.168	.000	.023	.878
	Apparel Product Involvement	.157	.731	.466				
	Self-Brand Connections with In-Group Brands X Apparel Product Involvement	-.072	-.153	.878				

Table 4.13 Multiple Regression Results Testing for the Moderating Effects of Apparel Product Involvement for Out-Group Brands (H3)

Dependent Variable: Perception of Brand Image Characteristic/Design

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with Out-Group Brands	.623	9.456	.000	.388	.388	89.414	.000
2	Self-Brand Connections with Out-Group Brands	.620	9.285	.000	.388	.000	.092	.762
	Apparel Product Involvement	.020	.304	.762				
3	Self-Brand Connections with Out-Group Brands	.811	2.275	.024	.390	.388	.001	.586
	Apparel Product Involvement	.074	.623	.535				
	Self-Brand Connections with Out-Group Brands X Apparel Product Involvement	-.209	-.547	.586				

Table 4.14 Multiple Regression Results Testing for the Moderating Effects of Apparel Product Involvement for Out-Group Brands (H3)

Dependent Variable: Perception of Brand Image Characteristic/Prestige and Workmanship

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with Out-Group Brands	.423	5.548	.000	.179	.179	30.780	.000
2	Self-Brand Connections with Out-Group Brands	.426	5.511	.000	.180	.000	.073	.787
	Apparel Product Involvement	-.021	-.271	.787				
3	Self-Brand Connections with Out-Group Brands	.234	.566	.572	.181	.001	.225	.636
	Apparel Product Involvement	-.075	-.544	.587				
	Self-Brand Connections with Out-Group Brands X Apparel Product Involvement	.211	.474	.636				

Hypothesis 4 examines the moderating effects of self-construal on the relationship between self-brand connections and perceptions of brand image characteristics. In Hypothesis 4a, we proposed that both independent and interdependent self-construal will moderate the relationship between self-brand connections on perceptions of brand image characteristics for both in-group and out-group brands. Multiple regression analyses were conducted to test whether independent and interdependent self-construal interacted with self-brand connections when predicting the perceptions of brand image characteristics. The results showed only one moderating effect. Independent self-construal was found to have a main effect (β=.234, p=.001) on perceptions of design and a moderating effect (β=-1.317, p<.05) on the relationship between self-brand connections and perceptions of design for in-group brands (Table 4.15). To illustrate the moderating effect of independent self-construal, participants were split into two equal groups based on the median scores of independent self-construal scores: low independents versus high independents groups. Figure 4.1 shows perceptions of design by self-brand connections across self-construal groups (high vs. low). An interaction effect can be found between self-brand connections and design perceptions for in-group brands with the high independent group showing a higher slope compared to low independents. In addition, the main effects of independent self-construal was found for workmanship (β=.164, p<.05) but no moderating effect was present. Thus, the hypothesis 4a was partially accepted.

Hypothesis 4b examined the moderating effects of independent and interdependent self-construal on the relationship between self-brand connections and perceptions of brand image characteristics for out-group brands. The result showed no

main or moderating effects by the two types of self-construal. Thus, Hypothesis 4b was rejected.

Table 4.15 Multiple Regression Results Testing for the Moderating Effects of Independent Self-Construal for In-Group Brands (H4a)

Dependent Variable: Perception of Brand Image Characteristic/Design

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with In-Group Brands	.580	8.453	.000	.336	.336	71.452	.000
2	Self-Brand Connections with In-Group Brands	.523	7.681	.000	.388	.052	11.840	.001
	Independent Self-Construal	.234	3.441	.001				
3	Self-Brand Connections with In-Group Brands	1.596	3.447	.001	.411	.023	5.484	.021
	Independent Self-Construal	.768	3.234	.002				
	Self-Brand Connections with In-Group Brands X Independent Self-Construal	-1.317	-2.342	.021				

Table 4.16 Multiple Regression Results Testing for the Moderating Effects of Independent Self-Construal for In-Group Brands (H4a)

Dependent Variable: Perception of Brand Image Characteristic/Prestige

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with In-Group Brands	.402	5.216	.000	.162	.162	27.205	.000
2	Self-Brand Connections with In-Group Brands	.378	4.768	.000	.171	.009	1.584	.210
	Independent Self-Construal	.100	1.259	.210				
3	Self-Brand Connections with In-Group Brands	.021	.039	.969	.174	.003	.432	.512
	Independent Self-Construal	-.078	-.276	.783				
	Self-Brand Connections with In-Group Brands X Independent Self-Construal	.438	.657	.512				

Table 4.17 Multiple Regression Results Testing for the Moderating Effects of Independent Self-Construal for In-Group Brands (H4a)

Dependent Variable: Perception of Brand Image Characteristic/Workmanship

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with In-Group Brands	.392	5.065	.000	.154	.154	25.655	.000
2	Self-Brand Connections with In-Group Brands	.353	4.472	.000	.179	.025	4.275	.041
	Independent Self-Construal	.163	2.068	.041				
3	Self-Brand Connections with In-Group Brands	.634	1.161	.248	.181	.002	.271	.604
	Independent Self-Construal	.303	1.081	.281				
	Self-Brand Connections with In-Group Brands X Independent Self-Construal	-.345	-.520	.604				

Table 4.18 Multiple Regression Results Testing for the Moderating Effects of Interdependent Self-Construal for In-Group Brands (H4a)

Dependent Variable: Perception of Brand Image Characteristic/Design

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with In-Group Brands	.580	8.453	.000	.336	.336	71.452	.000
2	Self-Brand Connections with In-Group Brands	.579	8.345	.000	.336	.000	.019	.891
	Interdependent Self-Construal	.010	.137	.891				
3	Self-Brand Connections with In-Group Brands	.855	2.005	.047	.338	.002	.431	.513
	Interdependent Self-Construal	.139	.665	.507				
	Self-Brand Connections with In-Group Brands X Interdependent Self-Construal	-.322	-.656	.513				

Table 4.19 Multiple Regression Results Testing for the Moderating Effects of Interdependent Self-Construal for In-Group Brands (H4a)

Dependent Variable: Perception of Brand Image Characteristic/Prestige

		Standardized Coefficients			Change Statistics			
Model		Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with In-Group Brands	.402	5.216	.000	.162	.162	27.205	.000
2	Self-Brand Connections with In-Group Brands	.398	5.104	.000	.163	.001	.235	.628
	Interdependent Self-Construal	.038	.485	.628				
3	Self-Brand Connections with In-Group Brands	-.266	-.558	.578	.175	.012	1.993	.160
	Interdependent Self-Construal	-.273	-1.170	.244				
	Self-Brand Connections with In-Group Brands X Interdependent Self-Construal	.773	1.412	.160				

Table 4.20 Multiple Regression Results Testing for the Moderating Effects of Interdependent Self-Construal for In-Group Brands (H4a)

Dependent Variable: Perception of Brand Image Characteristic/Workmanship

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with In-Group Brands	.392	5.065	.000	.154	.154	25.655	.000
2	Self-Brand Connections with In-Group Brands	.392	4.999	.000	.154	.000	.008	.929
	Interdependent Self-Construal	.007	.089	.929				
3	Self-Brand Connections with In-Group Brands	.787	1.636	.104	.158	.004	.694	.406
	Interdependent Self-Construal	.192	.815	.416				
	Self-Brand Connections with In-Group Brands X Interdependent Self-Construal	-.461	-.833	.406				

Table 4.21 Multiple Regression Results Testing for the Moderating Effects of Independent Self-Construal for Out-Group Brands (H4b)

Dependent Variable: Perception of Brand Image Characteristic/Design

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with Out-Group Brands	.623	9.456	.000	.388	.388	89.414	.000
2	Self-Brand Connections with Out-Group Brands	.623	9.456	.000	.394	.006	1.472	.227
	Independent Self-Construal	.080	1.213	.227				
3	Self-Brand Connections with Out-Group Brands	.868	2.525	.013	.397	.002	.528	.469
	Independent Self-Construal	.157	1.257	.211				
	Self-Brand Connections with Out-Group Brands X Independent Self-Construal	-.262	-.727	.469				

Table 4.22 Multiple Regression Results Testing for the Moderating Effects of Independent Self-Construal for Out-Group Brands (H4b)

Dependent Variable: Perception of Brand Image Characteristic/Prestige and Workmanship

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with Out-Group Brands	.423	5.548	.000	.423	.179	30.780	.000
2	Self-Brand Connections with Out-Group Brands	.423	5.534	.000	.424	.180	.165	.685
	Independent Self-Construal	-.031	-.406	.685				
3	Self-Brand Connections with Out-Group Brands	-.050	-.125	.901	.434	.189	1.465	.228
	Independent Self-Construal	-.180	-1.243	.216				
	Self-Brand Connections with Out-Group Brands X Independent Self-Construal	.505	1.210	.228				

Table 4.23 Multiple Regression Results Testing for the Moderating Effects of Interdependent Self-Construal for Out-Group Brands (H4b)

Dependent Variable: Perception of Brand Image Characteristic/Design

Model		Standardized Coefficients			Change Statistics			
		Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with Out-Group Brands	.623	9.456	.000	.388	.388	89.414	.000
2	Self-Brand Connections with Out-Group Brands	.622	9.400	.000	.388	.000	.019	.891
	Interdependent Self-Construal	.009	.137	.891				
3	Self-Brand Connections with Out-Group Brands	.796	1.877	.063	.389	.001	.171	.680
	Interdependent Self-Construal	.055	.425	.671				
	Self-Brand Connections with Out-Group Brands X Interdependent Self-Construal	-.184	-.414	.680				

Table 4.24 Multiple Regression Results Testing for the Moderating Effects of Interdependent Self-Construal for Out-Group Brands (H4b)

Dependent Variable: Perception of Brand Image Characteristic/Prestige and Workmanship

		Standardized Coefficients			Change Statistics			
	Model	Beta	t	Sig.	R-Square	R Square Change	F Change	Sig. F Change
1	Self-Brand Connections with Out-Group Brands	.423	5.548	.000	.179	.179	30.780	.000
2	Self-Brand Connections with Out-Group Brands	.419	5.483	.000	.184	.005	.854	.357
	Independent Self-Construal	.071	.924	.357				
3	Self-Brand Connections with Out-Group Brands	.295	.603	.547	.185	.000	.066	.798
	Independent Self-Construal	.038	.252	.801				
	Self-Brand Connections with Out-Group Brands X Independent Self-Construal	.131	.256	.798				

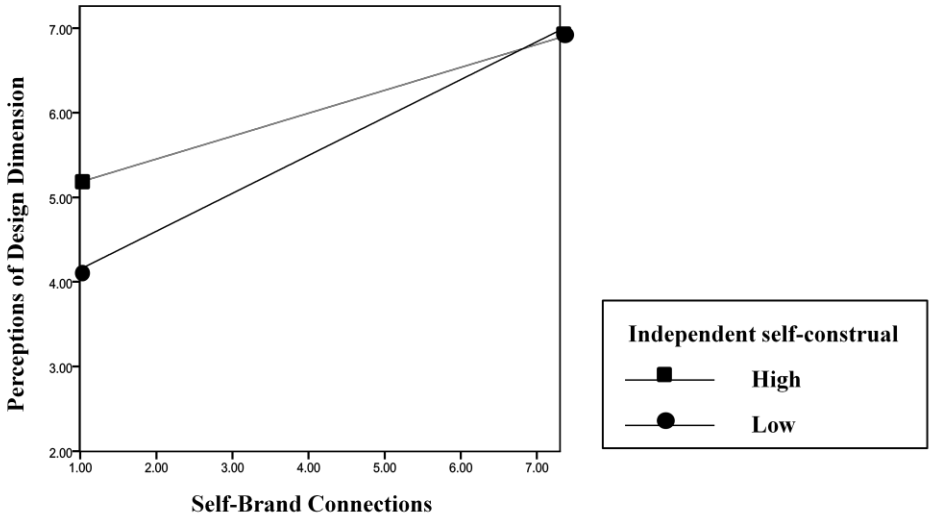

Figure 4.1 Perceptions of Design Dimension (High Vs. Low) by Self-Brand Connections across Self-Construal Groups for In-Group Brands

Chapter 5

DISCUSSION AND IMPLICATIONS

5.1 Summary of research

The current study examined the influence of reference groups on self-brand connections for apparel products and whether the degree of personal dissociation toward out-groups can moderate self-brand connections. This study also explored whether self-brand connections can have positive relationships with consumers' perceptions of brand image using a three dimensional brand image scale. The moderating effects of apparel product involvement and self-construal on the relationship between self-brand connections and perceptions of brand image characteristics were also examined.

Previous studies on self-brand connections focused on how an individual's self-brand connection can be created by different types of reference groups (Escalas & Bettman, 2005; White & Dahl, 2007). According to the researchers, individuals use the symbolic meanings of brands to express their self-concepts. Studies suggest that self-brand connections are strongly influenced by in-groups, a reference group to which an individual belongs. An individual's in-group can stimulate one's desire for self-expression and provide standards for one's self-image and brand usage. By incorporating the previously mentioned studies, this research examined self-brand connections for only apparel products. Apparel products have strong symbolic and value expressive functions closely tied to the consumer. This study expanded on the findings of previous studies by engaging in a deeper analysis of the apparel product category.

In terms of reference groups, this study used two types of reference groups, in-groups versus out-groups. In addition, based on White and Dahl's (2007) argument that the concept of dissociative group is necessary to distinguish between different out-groups, items measuring the level of dissociation toward the out-group were developed. Next, this study examined consumer attitudes toward brands associated with reference groups and the relationship between self-brand connections and perceptions of three brand image characteristics (design/prestige/workmanship). Finally, the moderating effects of product involvement and self-construal on the relationship between self-brand connections and perception of brand image characteristics was examined. This study examines the role of product involvement in relation to self-brand connections for the first time and expands on the findings of Escalas and Bettman (2005).

One hundred and forty-three female college students attending a mid-Eastern university participated in this study. An online survey was conducted and all participants from a list randomly generated by the registrar's office at the University. The age of participants mostly ranged from 18 to 23 and the major study of participants were diverse.

In terms of data analysis, descriptive statistics were used to summarize participant information. Factor analysis was used to confirm the validity of perception of brand image characteristics scale and reliability analysis was conducted on all multi-item measures. For hypotheses testing, three statistical analyses were used: paired t-test, correlation analysis and multiple regression analysis. In terms of hypothesis testing, Hypothesis 1a, Hypothesis 1b, and Hypothesis 2b were accepted, Hypothesis 2a and Hypothesis 4a were partially accepted, and Hypothesis 1c, Hypothesis 3, and Hypothesis 4b were rejected.

5.2 Discussion

Reference Groups. Several interesting observations were made related to participant responses and measurement. The reference groups listed by participants as in-groups and out-groups could be commonly found within the University environment. Many of the groups listed were sorority groups, sports groups, and special interest groups (e.g., UDress, Volunteer Club). The brand names associated with the in-groups and out-groups were commonly found to be popular among the college population (e.g., American Apparel, American Eagle, and Forever 21). Similar to previous findings by other researchers (Escalas & Bettman, 2005; White & Dahl, 2007), a particular brand could be listed in both in-group and out-group categories. For example, some participants listed the Abercrombie and Fitch brand as their in-group brand while other participants considered the Abercrombie and Fitch brand as an out-group brand.

Perceptions of Brand Image Characteristics. Factor analysis measuring the dimensions of consumer perceptions for brand image characteristics produced differing results for in-group versus out-group brands. As expected, three dimensions (design, prestige, and workmanship) were statistically distinguishable for in-group brands. However, only two dimensions (design and prestige/workmanship) were reported for out-group brands. It appears that the participants did not differentiate between prestige and workmanship when they were asked about their perceptions of brand image characteristics for out-group brands. The results indicate that consumers are likely to be more careful in taking into account the three distinct brand dimensions when they perceive apparel brands related to their in-group. Consumers may exhibit a more detailed analysis of brands that support their self-concept.

When examining the dimensions of brand image characteristics, interesting results were found for two items. One item measuring brand prestige ("Has good reputation") loaded on the dimension for workmanship for in-group brands. These findings showed evidence the consumers' perceptions of a brand's reputation centers around the workmanship of the product. These findings were partially supported by the combined "prestige/workmanship" factor dimension that was found for out-group brands. Another item measuring workmanship ("Fits my body well") did not load strongly on the intended workmanship factor for either in-group or out-group brands. One possible explanation about these findings is that consumers consider fit to be evaluated by only direct experience of apparel products rather than impression about brands. Or, fit may not be closely related to apparel brand usages for self-expressions.

Measuring Dissociative Groups. Results from the pilot study showed that the participants cannot distinguish between general out-group and dissociative groups. This led us to use the perceived disassociation measure as a substitute measure. The measure developed by the researcher for the study, level of association and disassociation were found to be a reliable measure for examining the strength of association (Cronbach's coefficient *alpha* = .919) and disassociation (Cronbach's coefficient *alpha* = .827) for in-groups and out-groups.

Self-Construal. For the self-construal measures, the reliabilities were .807 for independent self-construal and .796 for interdependent self-construal. These scores are relatively higher compared to other studies (Piamphonsant & Mandhachitara, 2007; Singelis, 1994). For example, Singilis (1994) reported the reliability scores of interdependent self-construal as .73 and that of independent self-construal as .69 when he initially suggested the self-construal scale. The reliability of

this scale was of concern to researchers in previous studies and some studies deleted several items from the scale to achieve higher reliability score (e.g., Piamphonsant & Mandhachitara, 2007).

Hypotheses Testing. Results from Hypothesis 1a shows that self-brand connections for in-group brands were significantly higher compared to out-group brands. These results were identical to findings by Escalas and Bettman (2005). The results indicate that in-group brands enhance consumers' psychological affiliation toward reference groups as well as their personal self-concept and the degree of self-brand connections can be elevated by interacting with in-group members. Results from Hypothesis 1b showed a strong relationship between self-brand connections and brand attitudes for both in-group and out-group brands. These results also confirmed findings by White and Dahl (2007). It is likely that self-brand connections significantly influence consumers' brand attitudes because such brands make a good impression on consumers when they create favorable brand associations by reference groups. The result for Hypothesis 1a and Hypothesis 1b showed that consumers tend to build favorable connections for the apparel product brands with images that are consistent with in-groups compared to brands with images matching out-groups. These findings confirmed two previous studies on self-brand connections (Escalas & Bettman, 2005; White & Dahl, 2007) in that brand meanings communicate "reference group identity" (Swaminathan, Page, & Gürhan-Canli, 2007, p. 257).

Hypothesis 1c tested the moderating effect of dissociation with out-groups on the relationship between self-brand connections and brand attitudes. The hypothesis was developed to examine the distinct concept of dissociative groups with general out-groups. It was assumed that the degree of dissociation with out-groups would moderate the influence of self-brand connections on apparel brand attitudes.

Hypothesis 1c was rejected and our efforts to identify distinct characteristics of specific out-groups based on the level of dissociation measure were not successful. One possible explanation is that the participants in this study entered the name of a dissociative group as the out-group when they were asked to list their out-group to which they may have mostly negative feelings or impressions.

Next, Hypothesis 2a examines the difference in consumer perceptions of brand image characteristics for in-group and out-group brands. The design and workmanship dimensions for in-group brands were more favorably perceived by participants compared to out-group brands. The results revealed that in-groups influence participants' self-expression with apparel brand images of design and workmanship dimensions. Eckman, Damhorst, and Kadolph (1990) suggest that the aesthetic set of intrinsic criteria (e.g., the criteria of style, color and pattern, fabric, and appearance) for apparel products has strong effects on purchase decision making for apparel products. Especially, the design dimension of apparel products may be mainly considered as an important aspect of college student's self-brand connections and, in turn, brand purchase behavior (e.g., brand evaluations, and choice). There was no difference in perceptions of prestige between in-group and out-group brands. The result reveals that exclusivity and status, which were used to measure prestige dimensions, are not a big concern to college students as the participants did not differentiate prestige for in-group and out-group brands.

Results for Hypothesis 2b tested relationships between self-brand connections and perceptions of brand image characteristics for in-group brands. It is likely that consumers positively perceive and prefer such brand images than any other brands when the brand meanings are matched to one's self-concept. The result is similar to White and Dahl (2007)'s findings that self-brand connections within

different reference groups can be closely related to the favorable/unfavorable brand evaluations. In addition, our findings show that self-brand connections are important in forming favorable impressions of brands for design, workmanship and prestige. The implications for apparel marketers for building self-brand connections that influence perceptions of other product characteristics are strong.

In terms of Hypothesis 3, only a main effect was found for apparel product involvement on perceptions of design for in-group brands. Results suggest that consumers who were more interested in apparel products are more likely to express favorable responses related to the product design for in-group brands. The results indicate that these consumers rely on the design dimension to meet one's self-expressive needs and desire. No moderating role of apparel product involvement on the relationship between self-brand connections and brand image perceptions was found. One possible reason is that one's brand image perceptions are created by an individual's favorable/unfavorable brand association irrespective of one's interests in apparel products. In addition, it is possible that participants, the female college students, in the study had an inherent interest in apparel products and this may have influenced the results.

For Hypothesis 4a, a moderating effect of only independent self-construal on the relationship between self-brand connections and perceptions of design was found for in-group brands. The findings indicate that self-brand connections for independent consumers are closely related to the design dimension, which expresses their uniqueness and individuality. According to Markus and Kitayama (1991), in some cases, the independent's social responsiveness arises from "the need to strategically determine the best way to express or assert the internal attributes of the self" (p. 226). Independent self-construal may facilitate the influence self-brand

association on design perceptions to maintain one's own unique self-concept. In addition, the result of the significant main effect of independent self-construal on the workmanship perception for in-group brands may partially support Kim and Kean (2009) in that high quality is an important criterion in the independent consumers' purchasing clothing.

In Hypothesis 4b, neither type of self-construal had effects on brand perception for out-group brands. These results somewhat contradict Escalas and Bettman (2005) who showed individuals with higher independent self-construal to form negative self-brand connections for out-groups. The results indicate that a person's level of self-construal was not influential in formation of brand image for out-group brands. Consumers may focus on only certain brands which contribute to maintain one's self-expression whereas they may have little interests in out-group brands regardless of one's reliance on reference groups, which is related to one's self-construal.

In conclusion, the study provided insightful knowledge and practical implications for better understanding the antecedents and consequences of self-brand connections for apparel products. There is prior research on reference group influences or consumer brand attitudes toward apparel products, however, less work focuses on self-brand associations within reference groups for this product category. Although most of the hypotheses which predicted the moderating variables to influence the relationship between self-brand connections on brand image perceptions were not accepted, the current study confirms the self-congruity theory and a theory of meaning movement; consumers accept brand meanings through reference groups and their apparel brand usage is significantly related to one's self-identity (e.g., Dolich, 1969; Levy, 1978; McCracken, 1982). Moreover, current findings contribute to

broadening knowledge of self-brand connections by examining the influential role of self-brand connections on consumer brand perceptions.

The empirical evidence suggests some practical implications to apparel brand marketers and retailers. A brand image is commonly used to segment consumer groups because perceptions of brand image can differ by consumer groups (Herzog, 1963). The findings in this study indicated that individuals from diverse reference groups differently perceive and evaluate brand images. Thus, apparel brand companies should recognize the importance of reference groups in developing one's self-brand association, brand preferences and attitudes. Accordingly, some promotional strategies (e.g., advertisement messages) which motivate consumers' sense of belonging can be effective in appealing to young apparel consumers. Viral marketing using online social networks, which young consumers actively use for social interactions, can be also useful to promote apparel brand images. Currently, consumers are searching for information about apparel brands, expressing their likes/dislike, and sharing diverse opinions about apparel brands through online websites such as Facebook and fashion blogs. Apparel brand companies may be able to better comprehend their target consumers through these social networking websites and build enthusiasm for the brands. Further, the findings from this study indicated that the design dimension, which visualizes one's uniqueness and individuality, is very critical in consumer brand image perceptions. It can be assumed that above prestige and workmanship, design is the most important aspect of the product which consumers process to develop self-brand linkages. In addition, a consumer's independent tendencies influences how one's self-brand connections determine perceptions of design. Brand marketers should develop their brand image and product design which

enhance consumers brand association in relation to self-concept. Further research is needed on how brands appeal to independent consumers.

5.3 Limitations and directions for future research

Despite the contribution made by the current research, several limitations were found. First of all, this study used a convenience sample of female college students at a University. The findings are not generalizable to other population groups. For example, female consumers have been considered to be more highly involved in apparel products compared to male consumers (e.g., Jin & Goh, 1999; Kim, Damhorst, & Lee, 2002). In addition, young college students' self-brand connections, brand impressions, and apparel shopping experiences are limited due to their specific reference groups (e.g., campus group). Thus, different result concerning self-brand connections may be obtained with different age and gender groups.

Second, one potential limitation is the sample used in measuring self-construal. Self-construal scale was initially developed to compare individual differences based on a cultural perspective, Individualism versus Collectivism. Using a sample base from the United States, where independent self-construal is high, the weak variance achieved in the responses for self-construal may have influenced the results.

Third, the study was not able to identify the dissociative group influence on self-brand connections. Future studies should test the dynamics of dissociative groups versus out-groups in relation to self-brand connections for apparel brands. Measures used in past research combined with the newly developed dissociation measure may be used to validate the differences between the two groups.

Fourth, items in the new scaled developed by Shin, Kim, and Lennon (2010) did not load as intended for some dimensions. For example, the participants could not differentiate between prestige and workmanship for out-group brands. To verify whether the scale of brand image characteristics is applicable for fashion and apparel studies, further testing is needed. Different product categories such as luxury fashion products can be suggested to test perceptions of brand image characteristics. Luxury fashion products are considered to convey strong brand symbolism and each brand has its own unique brand image (e.g., sexy and fashionable for Gucci vs. high quality and classic for Louis Vuitton). Thus, this category may be interesting to study perceptions of brand image characteristics in relation to self-brand connections.

Future studies on self-brand connections can be conducted across other cultures to compare results related to reference group influence and self-construal. Past brand research showed that there is a difference in purchase behavior between two cultures, Western versus Eastern. For example, consumers in the Eastern culture (e.g., South Korea) tend to depend more on their reference groups such as peer and social groups when they make purchase decisions compared to those in the Western culture (Jung & Sung, 2006). Wong and Ahuvia (1998) also illustrated the differences in luxury consumption between Eastern and Western culture: Western consumers tended to purchase luxuries to express individual's uniqueness and reflect their private preferences while Asian consumers purchase those products in order to express their social status or wealth. Therefore, based on different cultural backgrounds studied, result concerning the influence of reference groups on self-brand connections and perceptions of brand image resulting from self-brand connections may differ.

In addition, further research is needed to examine the direct influence of consumers' self-brand connections on consumer purchase behavior. This study

investigated the influence of self-brand connections in brand image perceptions, thus, our results cannot confirm whether self-brand connections directly influence consumer brand purchase behavior.

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APPENDIX A:

HUMAN SUBJECTS FORM

UNIVERSITY OF DELAWARE

RESEARCH OFFICE

210 Hullihen Hall
University of Delaware
Newark, Delaware 19716-1551
Ph: 302/831-2136
Fax: 302/831-2828

DATE:	May 21, 2010
TO:	Sooyeon Kim
FROM:	University of Delaware IRB
STUDY TITLE:	[172163-1] The relationship between self-brand connections and reference groups for apparel products
IRB REFERENCE #:	
SUBMISSION TYPE:	New Project
ACTION:	DETERMINATION OF EXEMPT STATUS
DECISION DATE:	May 21, 2010
REVIEW CATEGORY:	Exemption category #2

Thank you for your submission of New Project materials for this research study. The University of Delaware IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will put a copy of this correspondence on file in our office. Please remember to notify us if you make any substantial changes to the project.

If you have any questions, please contact Robin Bhaerman at (302) 831-1119 or bhaerman@udel.edu. Please include your study title and reference number in all correspondence with this office.

APPENDIX B:

SURVEY INSTRUMENT

Self-brand connections for apparel brand

Thank you for participating in this consumer study! The questionnaire can be completed in about 20 minutes. Again, your responses will be confidential and we will not identify any sources of responses.

Upon completion of this survey, your e-mail address (${m://Email1}) will be entered in a raffle for four $25 certificates from a local Starbucks.

For questions concerning this study, please contact Sooyeon Kim (sykim@udel.edu) or Dr. Hye-Shin Kim (hskim@udel.edu) in the Department of Fashion and Apparel Studies at the University of Delaware.

Directions: In the box below, we would like you to type in the name of **a group on campus that you belong to and feel a part of.** You should feel you are this type of person and that you fit in with these people. This group should be a tightly knit group, consisting of individuals who are very similar to one another.

Directions: We would like you to describe your opinion about the group **${q://QID1/ChoiceTextEntryValue}** using the scale below.

Directions: We would like you to describe your opinion about the group **${q://QID1/ChoiceTextEntryValue}** using the scale below.

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
I belong to the group ${q://QID1/ChoiceTextEntryValue}.	○	○	○	○	○	○	○
I am the type of person that would belong to the group ${q://QID1/ChoiceTextEntryValue}.	○	○	○	○	○	○	○
I fit in with the group ${q://QID1/ChoiceTextEntryValue}.	○	○	○	○	○	○	○
I like being associated with the group ${q://QID1/ChoiceTextEntryValue}.	○	○	○	○	○	○	○

Directions: In the box below, we would like you to type in **an apparel brand that is consistent with the group that you belong to**. This can be a brand that members of a group actually use or it can be a brand that shares the same image as the group. A brand is considered to be a name or symbol that distinguishes one seller's goods from another's.

Directions: In the box below, we would like you to type in the name of **a group on campus that you do NOT belong to and do NOT feel a part of.** You should feel you are not this type of person and that you do not fit in with these people. This group should be a tightly knit group, consisting of individuals who are very similar to one another.

Directions: We would like you to describe your opinion about the group **${q://QID3/ChoiceTextEntryValue}** using the scale below.

Directions: We would like you to describe your opinion about the group **${q://QID3/ChoiceTextEntryValue}** using the scale below.

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
I do not belong to the group ${q://QID3/ChoiceTextEntryValue}.							
I am not the type of person that would belong to the group ${q://QID3/ChoiceTextEntryValue}.							
I do not fit in with the group ${q://QID3/ChoiceTextEntryValue}.							
I avoid being associated with the group ${q://QID3/ChoiceTextEntryValue}.							

DIrections: In the box below, we would like you to type in **an apparel brand that is consistent with the group that you do NOT belong to**. This can be a brand that members actually use or it can be a brand that shares the same image as the group. A brand is considered to be a name or symbol that distinguishes one seller's goods from another's.

Directions: We would like to know your feelings about apparel shopping. Using the scale below, please indicate your opinions about apparel shopping.

Directions: We would like to know your feelings about apparel shopping. Using the scale below, please indicate your opinions about apparel shopping.

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
To me, shopping for apparel is an adventure.							
I find shopping for apparel to be stimulating.							
Shopping for apparel makes me feel like I am in my own universe.							
When I'm in a down mood, I go shopping for apparel to make me feel better.							
To me, apparel shopping is a way to relieve stress.							
I go shopping for apparel when I want to treat myself to something special.							
For the most part, I go shopping for apparel when there are sales.							
I enjoy looking for discounts when I shop apparel products.							
I enjoy looking hunting for bargains when I shop apparel products.							
I go shopping to keep up with the fashion trends.							
I go shopping to keep up with the new fashions.							
I go shopping to see what new apparel products are available.							

Directions: We would like to know the importance of the following characteristic when you are selecting apparel products. Using the scale below, please indicate the importance of each apparel product characteristic to you.

When selecting apparel products, it is important that the apparel products . . .

Directions: We would like to know the importance of the following characteristic when you are selecting apparel products. Using the scale below, please indicate the importance of each apparel product characteristic to you.

When selecting apparel products, it is important that the apparel products . . .

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
are appealing in appearance.							
are appealing in style.							
are appealing in color.							
provide a variety in design to suit my needs.							
provide exclusivity.							
provide status.							
have good reputation.							
have good craftsmanship.							
have good manufacturing quality.							
fit my body well.							

Please indicate your opinions of **${q://QID2/ChoiceTextEntryValue}** using the scale below.

Please indicate your opinions of **${q://QID2/ChoiceTextEntryValue}** using the scale below.

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
This brand reflects who I am.							
I can identify with this brand.							
I feel a personal connection to this brand.							
I use this brand to communicate who I am to other people.							
I think this brand helps me become the type of person I want to be.							
I consider this brand to be "me" (it reflects who I consider myself to be or the way that I want to present myself to others).							
This brand suits me well.							

Please indicate your opinions of **${q://QID4/ChoiceTextEntryValue}** using the scale below.

Please indicate your opinions of **${q://QID4/ChoiceTextEntryValue}** using the scale below.

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
This brand reflects who I am.							
I can identify with this brand.							
I feel a personal connection to this brand.							
I use this brand to communicate who I am to other people.							
I think this brand helps me become the type of person I want to be.							
I consider this brand to be "me" (it reflects who I consider myself to be or the way that I want to present myself to others).							
This brand suits me well.							

Please indicate your evaluation of each image characteristic for **${q://QID2/ChoiceTextEntryValue}**.

To me, **${q://QID2/ChoiceTextEntryValue}**. . .

Please indicate your evaluation of each image characteristic for **${q://QID2/ChoiceTextEntryValue}**.

To me, **${q://QID2/ChoiceTextEntryValue}**. . .

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
is appealing in appearance.	○	○	○	○	○	○	○
is appealing in style.	○	○	○	○	○	○	○
is appealing in color.	○	○	○	○	○	○	○
provides a variety in design to suit my needs.	○	○	○	○	○	○	○
provides exclusivity.	○	○	○	○	○	○	○
provides status.	○	○	○	○	○	○	○
has good reputation.	○	○	○	○	○	○	○
has good craftsmanship.	○	○	○	○	○	○	○
has good manufacturing quality.	○	○	○	○	○	○	○
fits my body well.	○	○	○	○	○	○	○

Please indicate your evaluation of each image characteristic for **${q://QID4/ChoiceTextEntryValue}.**

To me, **${q://QID4/ChoiceTextEntryValue}** . . .

Please indicate your evaluation of each image characteristic for **${q://QID4/ChoiceTextEntryValue}.**

To me, **${q://QID4/ChoiceTextEntryValue}** . . .

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
is appealing in appearance.	○	○	○	○	○	○	○
is appealing in style.	○	○	○	○	○	○	○
is appealing in color.	○	○	○	○	○	○	○
provides a variety in design to suit my needs.	○	○	○	○	○	○	○
provides exclusivity.	○	○	○	○	○	○	○
provides status.	○	○	○	○	○	○	○
has good reputation.	○	○	○	○	○	○	○
has good craftsmanship.	○	○	○	○	○	○	○
has good manufacturing quality.	○	○	○	○	○	○	○
fits my body well.	○	○	○	○	○	○	○

The following question concerns your feelings regarding **${q://QID2/ChoiceTextEntryValue}**. For each rating, read the words on the end of each scale and click on the circle that best describes your feelings about the statement you are rating.

For example, you should click on the circle closest to the words if your feelings are strong and the word is very descriptive of your feelings. If your feelings are neutral, you should click on the middle circle. Other circle positions represent moderate feelings.

My feeling about **${q://QID2/ChoiceTextEntryValue}** is . . .

The following question concerns your feelings regarding **${q://QID2/ChoiceTextEntryValue}**. For each rating, read the words on the end of each scale and click on the circle that best describes your feelings about the statement you are rating.

For example, you should click on the circle closest to the words if your feelings are strong and the word is very descriptive of your feelings. If your feelings are neutral, you should click on the middle circle. Other circle positions represent moderate feelings.

My feeling about **${q://QID2/ChoiceTextEntryValue}** is . .

unfavorable	○ ○ ○ ○ ○ ○ ○	favorable
dislike	○ ○ ○ ○ ○ ○ ○	like
bad	○ ○ ○ ○ ○ ○ ○	good

The following question concerns your feelings regarding **${q://QID4/ChoiceTextEntryValue}**. For each rating, read the words on the end of each scale and click on the circle that best describes your feelings about the statement you are rating.

For example, you should click on the circle closest to the words if your feelings are strong and the word is very descriptive of your feelings. If your feelings are neutral, you should click on the middle circle. Other circle positions represent moderate feelings.

My feeling about **${q://QID4/ChoiceTextEntryValue}** is . . .

The following question concerns your feelings regarding **${q://QID4/ChoiceTextEntryValue}**. For each rating, read the words on the end of each scale and click on the circle that best describes your feelings about the statement you are rating.

For example, you should click on the circle closest to the words if your feelings are strong and the word is very descriptive of your feelings. If your feelings are neutral, you should click on the middle circle. Other circle positions

represent moderate feelings.

My feeling about
${q://QID4/ChoiceTextEntryValue} is . .

unfavorable	○ ○ ○ ○ ○ ○ ○	favorable
dislike	○ ○ ○ ○ ○ ○ ○	like
bad	○ ○ ○ ○ ○ ○ ○	good

To what extent do you agree or disagree with each statement? (Please indicate your answer.)

To what extent do you agree or disagree with each statement? (Please indicate your answer.)

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
I have respect for the authority figures with whom I interact.	○	○	○	○	○	○	○
It is important for me to maintain harmony within my group.	○	○	○	○	○	○	○
My happiness depends on the happiness of those around me.	○	○	○	○	○	○	○
I would offer my seat in a bus to my professor.	○	○	○	○	○	○	○
I respect people who are modest about themselves.	○	○	○	○	○	○	○
I will sacrifice my self-interest for the benefit of the group I am in.	○	○	○	○	○	○	○

Strongly Disagree Disagree Somewhat Disagree Neutral Somewhat Agree Agree Strongly Agree

I often have the feeling that my relationships with others are more important than my own accomplishments.	○	○	○	○	○	○	○
I should take into consideration my parents' advice when making education/career plans.	○	○	○	○	○	○	○
It is important to me to respect decisions made by the group.	○	○	○	○	○	○	○
I will stay in a group if they need me, even when I'm not happy with the group.	○	○	○	○	○	○	○
If my brother, sister, or closest family member fails, I feel responsible.	○	○	○	○	○	○	○
Even when I strongly disagree with group members, I avoid an argument.	○	○	○	○	○	○	○

Strongly Disagree Disagree Somewhat Disagree Neutral Somewhat Agree Agree Strongly Agree

I'd rather say "No" directly, than risk being misunderstood.	○	○	○	○	○	○	○
Speaking up during a class is not a problem for me.	○	○	○	○	○	○	○
Having a lively imagination is important to me.	○	○	○	○	○	○	○
I am comfortable with being singled out for praise or rewards.	○	○	○	○	○	○	○
I am the same person at home that I am at school.	○	○	○	○	○	○	○
Being able to take care of myself is a primary concern for me.	○	○	○	○	○	○	○

Strongly Disagree Disagree Somewhat Disagree Neutral Somewhat Agree Agree Strongly Agree

I act the same way no matter who I am with.	○	○	○	○	○	○	○
I feel comfortable using someone's first name soon after I meet them, even when they are much older than I am.	○	○	○	○	○	○	○
I prefer to be direct and forthright when dealing with people I've just met.	○	○	○	○	○	○	○
I enjoy being unique and different from others in many respects.	○	○	○	○	○	○	○
My personal identity, independent of others, is very important to me.	○	○	○	○	○	○	○
I value being in good health above everything.	○	○	○	○	○	○	○

In the question below, we would like to know how you perceive apparel products. For each rating, read the words on the end of each scale and click on the circle that best describes your perceptions.

For example, you should click on the circle closest to the words if you think that the word is very descriptive of your opinions. If you think that it is neutral, you should click on the middle circle. Other circle positions represent moderate opinions.

Using the following bipolar adjective scales, we would like you to tell us how you perceive apparel products.

In the question below, we would like to know how you perceive apparel products. For each rating, read the words on the end of each scale and click on the circle that best describes your perceptions.

For example, you should click on the circle closest to the words if you think that the word is very descriptive of your opinions. If you think that it is neutral, you should click on the middle circle. Other circle positions represent moderate opinions.

Using the following bipolar adjective scales, we would like you to tell us how you perceive apparel products.

important	○ ○ ○ ○ ○ ○ ○	unimportant
boring	○ ○ ○ ○ ○ ○ ○	interesting
relevant	○ ○ ○ ○ ○ ○ ○	irrelevant
exciting	○ ○ ○ ○ ○ ○ ○	unexciting
means nothing	○ ○ ○ ○ ○ ○ ○	means a lot to me
appealing	○ ○ ○ ○ ○ ○ ○	unappealing
fascinating	○ ○ ○ ○ ○ ○ ○	mundane
worthless	○ ○ ○ ○ ○ ○ ○	valuable
involving	○ ○ ○ ○ ○ ○ ○	uninvolving
not needed	○ ○ ○ ○ ○ ○ ○	needed

To what extent do you agree or disagree with each statement? (Please indicate your answer.)

To what extent do you agree or disagree with each statement? (Please indicate your answer.)

Strongly Disagree Somewhat Neutral Somewhat Agree Strongly

	Disagree		Disagree		Agree		Agree
I can always manage to solve difficult problems if I try hard enough.	○	○	○	○	○	○	○
If someone opposes me, I can find the means and ways to get what I want.	○	○	○	○	○	○	○
It is easy for me to stick to my aims and accomplish my goals.	○	○	○	○	○	○	○
I am confident that I could deal efficiently with unexpected events.	○	○	○	○	○	○	○
Thanks to my resourcefulness, I know how to handle unforeseen situations.	○	○	○	○	○	○	○

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
I can solve most problems if I invest the necessary effort.	○	○	○	○	○	○	○
I can remain calm when facing difficulties because I can rely on my coping abilities.	○	○	○	○	○	○	○
When I am confronted with a problem, I can usually find several solutions.	○	○	○	○	○	○	○
If I am in trouble, I can usually think of a solution.	○	○	○	○	○	○	○
I can usually handle whatever comes my way.	○	○	○	○	○	○	○

What do you think was the purpose of this survey?

What is your age (Please write the number)?

What is your gender?

- ○ Male
- ○ Female

What is your major?

What is your current status at the University?

- ○ Undergraduate
- ○ Graduate
- ○ Other

How many years have you been enrolled at the University?

Survey Powered By Qualtrics ®

APPENDIX C:

SURVEY INVITATION E-MAIL

Dear Student,

Participate in a clothing survey and get a chance to win a raffle! Researchers at the University of Delaware are conducting a study of consumer attitudes about apparel brands.

Your e-mail address was randomly selected from a list of students registered at the University. The goal is to collect data from approximately 200 UD female students (18 years and over).

This survey can be completed in 20 minutes. After starting the survey, you may pause at any time and return to it later. Simply go back to the URL that's shown below. You will start up again where you left off.

There are no risks involved with this study and your responses to this survey will be kept completely confidential. At the end of the survey, you will be entered into a drawing for one of four $25 Starbucks gift certificates.

To access this online survey, please click on the following link:

Take the Survey

or copy and paste the URL below into your internet browser:

https://delaware.qualtrics.com/WRQualtricsSurveyEngine?Q_SS=bkJSldPVbw9MXze_b779jfuWPshQDek&_=1

Thank you in advance for participating in this very important study!

If you have any questions, please contact Sooyeon Kim (Tel: 302-367-6127, E-mail: sykim@udel.edu). If you have questions regarding your rights as a participant, you may contact the Chair of the Human Subjects Review Board (210 Hullihen Hall, University of Delaware, Newark, DE 19716, Tel: 302-831-2137).

Thank you!
Sooyeon Kim, UD Graduate Student
Department of Fashion and Apparel Studies

APPENDIX D:

SURVEY REMINDER E-MAIL

Dear Student,

Participate in a clothing survey and get a chance to win a raffle! Researchers at the University of Delaware are conducting a study of consumer attitudes about apparel brands.

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Thank you!
Sooyeon Kim, UD Graduate Student
Department of Fashion and Apparel Studies