Roles of Perceptions of Reference Groups, Clothing Symbolism, and Clothing Involvement in Female Adolescents' Clothing Purchase Intentions and Clothing Behavior

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ABSTRACT

The youth market has been characterized as one of the most coveted market segments because of its spending power and tremendous potential for becoming lifetime customers (Bush, Martin, & Bush, 2004). The product market for adolescents is expected to grow to more than $208 billion by 2011, according to a report from market research firm Packaged Facts (Sass, 2007). Apparel, jewelry, and cosmetics are top product categories for adolescent girls and are important products used by adolescents to portray personal identity (Ossorio, 1995). Because of adolescents' buying power and the important role apparel plays in adolescents' lives, it is important for apparel marketers to understand the adolescent consumer market.

The purpose of this research was to examine the relationship between each of three independent variables (i.e., reference groups, clothing symbolism, and clothing involvement) and adolescents' clothing purchase intentions and clothing behavior, and whether the three variables are predictors of adolescents' clothing purchase intentions and clothing behavior. Reference groups are a source of instrumental and emotional support, offering adolescents a sense of belonging during their physical, emotional, and cognitive adjustment (Blackwell, Miniard, & Engel, 2001). Adolescents may have many different types of reference groups. The reference groups included in the currents study were friends, popular girls, and parents. Specifically in the current study, ninth grade girls' perceptions of friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior were examined for their relationship to the ninth grade girls' clothing purchase intentions and

behavior. The second independent variable was clothing symbolism. Adolescents may use clothing as a symbol (i.e., clothing symbolism) to express their actual self-concepts or to attain their ideal self-concepts (Erickson, 1983; Solomon & Rabolt, 2004). Two types of clothing symbolism were included in the study: the degree of congruity between actual self-concept and the perceived images of four outfits (i.e., actual self and clothing image congruity) and the degree of congruity between ideal self-concept and the perceived images of four outfits (i.e., ideal self and clothing image congruity). The third independent variable was clothing involvement. Viera (2009) found that young consumers are highly involved with clothing. The degree of clothing involvement may be closely related to adolescent girls' clothing purchase intentions and their clothing behavior.

A conceptual model that formed the framework for this study was developed by integrating several theories, propositions, and research findings in the literature. Based on the framework, 16 research questions were formulated. Focus groups provided input for questionnaire development, and four outfit images, one each considered sexy, conservative, springy, or sporty, were identified and included in the questionnaire. Before the main data collection, the questionnaire was pilot tested and revised. Data collection was conducted at three high schools in central Virginia, and 353 female students in the ninth grade participated. Standard and stepwise multiple regression analyses were used to address the research questions.

Among the four outfit images, that with a sexy image was found to have the highest mean score for ideal self-concept, indicating that participants would most like to view themselves sexy. Results of a factor analysis for clothing involvement revealed three factors: clothing importance, clothing expressions, and clothing brand perceptions. Participants had fairly high mean scores for all three clothing involvement factors. Among those three factors, clothing importance had the highest mean. In addition, results showed that participants perceived that their friends and popular girls would most often wear the outfit with a sporty image, and they also perceived that their parents would most like them to wear an outfit with a sporty image. The sporty outfit image also had the highest mean for participants' clothing purchase intentions and clothing behavior among the four outfit images.

Results of one of the stepwise regressions, for the sexy outfit image showed that perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing

behavior, parents' opinions concerning clothing behavior, popular girls' clothing behavior), one type of clothing symbolism (i.e., ideal self and clothing image congruity), and one clothing involvement factor (i.e., clothing importance) predicted adolescent girls' purchase intentions for the outfit with a sexy image. The results for wearing clothing with a sexy image when hanging out with friends were slightly different from those for purchase intentions. For the behavior of wearing an outfit with a sexy image, the variable "perceptions of popular girls' clothing behavior" was not a predictor, but actual self and clothing image congruity was. For the springy outfit image, all the perceptions of reference groups' clothing behavior or opinions and actual self and clothing image congruity were the best predictors of participants' clothing behavior; however only friends' clothing behavior and popular girls' clothing behavior were significant predictors of adolescent girls' purchase intentions for this outfit image. For the conservative and sporty outfit images, only the perceptions of reference groups' clothing behavior or opinions predicted adolescent girls' clothing purchase intentions and clothing behavior.

In conclusion, the research findings suggest a powerful relationship between adolescent girls' perceptions of reference groups' clothing behavior or opinions about clothing behavior and the girls' own clothing behavior and purchase intentions. Participants' perceptions of reference groups' clothing behavior or opinions were the best predictors of the participants' clothing behavior and purchase intentions for all four outfits. Furthermore, clothing symbolism (e.g., using a sexy outfit to express or attain a sexy image) appears to motivate ninth grade girls to wear clothing with a sexy or springy image. The girls would wear a sexy outfit to portray their actual self-concepts and attain their ideal self-concepts. They also would wear outfits with a springy image to portray themselves. Additionally, the more the participants in this study considered clothing to be important, the more likely they were to purchase and wear a sexy image outfit; however the participants indicated that, of the four outfit images in the study, they most purchase and wear clothing like the sporty image outfit the most for hanging out with friends in comparison to the other three outfit images. Based on the findings, suggestions and implications for parents, educators, and marketers were provided.

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CHAPTER I

INTRODUCTION

In this chapter, six sections are presented. In the first section, introduction, background information is conveyed in three subsections, which concern three variables (i.e., reference groups, clothing symbolism, clothing involvement) in relation to adolescents' purchase intentions and clothing behavior. The second section concerns the gaps in literature. The third section presents the purpose of the study. The fourth section contains the objectives of the study. The fifth section presents the conceptual definitions of variables in the study. The chapter concludes with assumptions and limitations.

The Adolescent and the Adolescent Market

Daters (1990) defines adolescence as a transitional period between childhood and adulthood. Adolescence is a period when much personal growth takes place, such as physical, psychological, and social growth (Hopkins, 1983; Institute of Medicine, 1994). Self-concept formation has been considered the most significant developmental milestone of adolescence (Richman, Clark, & Brown, 1985). During adolescent years, young adults are forming their self-concept identities through trial and error from positive and negative experiences. Self-concept becomes a part of an adolescent's identity that will remain with that person for the rest of her or his life.

The adolescent market has been one of the fast growing market segments in the United States (U.S.) in the last decade (Simpson & Douglas, 1998). One reason is that adolescents are gaining purchasing power and influence. In July 2009, it was estimated that there were 20 million people ages 10 to 14 years and 21.5 million people ages 15 to 19 years in the United States (U.S. Census Bureau, 2009). Adolescents as a group spend 90% of their entire earnings, 40% have regular jobs, and 90% receive weekly income. In 2002,

adolescents, ages 12 to 19, spent $170 billion on goods and services, double the amount of 10 years ago (360 Youth, 2004). Out of the $170 billion, $70 billion (41.2%) was spent on clothing, shoes, and accessories (Stossel, 2003; Wood, 2002). In 2007, a Teenage Research Unlimited survey revealed that, different from the adolescents 10 years before, adolescents today spend almost all of their money (98%), rather than saving it (Teens' Spending, 2007). The market for products in demand by adolescents is expected to grow to more than $208 billion by 2011, according to a report from market research firm Packaged Facts (Sass, 2007).

The youth market has been characterized as one of the most coveted market segments because of its spending power, ability to be trendsetters, receptivity to new products, and tremendous potential for becoming lifetime customers (Bush, Martin, & Bush, 2004). Recognizing the importance of the adolescent market, many companies have budgets earmarked to advertise to this group (Belleau, Summers, Xu, & Pinal, 2007). Children born after 1980 have been subjected to as many as 20,000 commercial messages a year for a decade and a half. Consumerism and brand awareness are central features of this generation's lives (Syrett & Lammiman, 2004). Because of adolescents' buying power, it is important for apparel marketers to understand adolescent consumer behavior.

Clothing as an Important Aspect of the Lives of Adolescents

Clothing is a relevant and important aspect of the lives of adolescents. Market Research (2004) reports that top purchase categories for both girls and boys include magazines, clothing, electronic games, and sporting goods. Apparel, jewelry, and cosmetics are top purchase categories for adolescent girls, and are important products used by adolescents to portray their identity (Ossorio, 1995). Clothing serves as a means of communication (Tortora & Eubank, 2009). To the person who is knowledgeable about a particular culture, clothing is a silent language. Clothing tells the observer something about the organization of the society in which it is worn. It discloses the social stratification of the society, revealing whether there are rigid delineations of social and economic classes.

Clothing also serves as a symbol that is a kind of catalyst that evokes feelings which extend far beyond the clothing itself (Horn, 1968). If the wearing of a bowler hat and a tweed

suit conveys the essence of the typical Englishman, such symbols may conjure up associations of political sentiments, social formalities, and moral sensibilities, none of which can be visualized, but all of which can be deeply felt or experienced. Symbolism in dress is often unconscious, but a symbol used consciously can be more powerful; that is, the designer or the wearer can, through careful manipulation, heighten the effect he wishes to create. A dynamic, forceful personality can be emphasized by strong angular lines, or by forms that are large in scale and widely spaced. Horn suggests that the effect may be confounded further through the use of coarse, heavy-handed textures, and bold colors in striking contrast. Thus, through a knowledgeable use of symbols, the communicator draws the communicant closely into the mood that is intended. The organization of clothing, therefore, is a form of artistic expression through which feelings and ideas are communicated. Because clothing serves as a form of communication through the use of symbols, it is important to understand adolescent clothing symbolism.

Francis (1992) found that poor social competence and poor peer relationships during adolescence could lead to later problems such as juvenile delinquency, school dropout, and psychiatric problems. As a result, it is important to facilitate opportunities that provide social participation for adolescents. Francis found that high school girls were more likely than college women to refuse invitations because they did not have appropriate clothing, and that high school was a place of intensified social aspects through formal and informal relationships. The latter is often in contrast to the adult world because, in the adult world, the public and private selves are more clearly marked than in an adolescent high school (Eicher, Baizerman, & Michelman, 1991). The study by Francis (1992) showed the importance of conducting research to understand how high school adolescents use clothing to cope with individual adjustment and to develop and communicate their identity.

Reference Groups

Tarrant (2002) views reference groups as valuable networks through which conceptions of identity and self-concept are developed. Reference groups are a source of instrumental and emotional support, offering adolescents a sense of belonging during periods of physical, emotional, and cognitive adjustment (Blackwell, Miniard, & Engel, 2001).

Adolescents protect and modify their self-concepts in their interactions with others in reference groups, and persons often maintain their self-concepts by conforming to roles they have learned in reference groups. Reference groups' social interactions are often face to face, which can have immediate influences on an adolescent; therefore, reference groups are important in the processes of adolescents' socialization (Moschis, 1987). Adolescents may be involved in many different types of reference groups. Three types of reference group influence (i.e., peers' influence, popular girls' influence, and parents' influence) are discussed in the following sections.

Peers' Influence

The power of peer influence is in the social pressures of conforming to group expectations. Shim and Koh (1997) found that adolescents who conformed to clothing norms of peers were more likely to be accepted in their social environment than were those who expressed their individualism. Consistent with Shim and Koh's study, Lachance, Legault, and Bujold (2000) found that adolescents' conformity to clothing patterns that occurred within social interactions was a significant factor in peer acceptance, and the most important agent in developing brand sensitivity in apparel is the influence of peers. Due to the importance of acceptance by and approval from peers, adolescents often use brand names on clothing to socially conform and to socially interact.

Many researchers have found that the relative degrees of parental influence and peer influence on adolescents' consumer behavior differ by the adolescent's age (Koester & May, 1985). As children age, parental influence decreases, and peer influence increases (Simpson & Douglas, 1998; Wilson & MacGillivray, 1998). Wilson and MacGillivray indicate that, as adolescents increasingly seek to be individuals, conforming to peers' standards in clothing provides a way of demonstrating independence from family, while showing solidarity with friends. The authors found that parents are the most important influence on clothing for sixth graders, but when adolescents reach ninth grade, peers become a substantially larger influence than parents. These studies showed that peers can be the most important influence on adolescents' social and consumption behaviors related to clothing. To understand adolescents' clothing purchase and wearing behaviors, it is essential to have knowledge of adolescents' perceptions of peer influences.

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Popular Girls' Influence

Adolescent girls often compare themselves to popular girls, demonstrating the power of the popular girls' influence. Festinger (1954) developed a theory of social comparison to help explain small group behavior. Festinger posited that humans have a drive to evaluate themselves by comparison to some standard; however, if there were no objective standards, comparisons would be made to other people (i.e., social comparisons). A comparison does not require direct, personal contact with a specific other person. It may be made through reading about others in the newspaper or hearing about another person through gossip. Individuals often expect to perform as well as other individuals who are similar to them and feel pleased when they do perform in a similar manner, but feel displeased when they do not (Goethals, 1986). Social comparison increases one's ability to evaluate his or her self-concept and offers an occasion for altering the self-concept (Lee, 1998). Persons engage in a relatively continuous self-evaluative process to determine whether they are "normal."

Escalas and Bettman (2003) studied reference groups as a source of brand associations. Results indicated that brands used by member groups and aspiration groups can become connected to consumers' mental representation of their selves as they use these brands to define and create their self-concepts. The degree to which member group and aspiration group usage of brands influenced individual self-concept, and brand connections were contingent on the degree to which the individual belonged to a member group or wished to belong to an aspiration group. Most adolescent girls consider popular girls a group against which they compare themselves; therefore, the influence of popular girls is noteworthy to study.

Parents' Influence

When dealing with the consumption of clothing, parents are recognized as the major sources of interaction during adolescence (Chen-Yu & Seock, 2002; Lachance, Beaudoin, Robitaille, 2003; Martin & Bush, 2000; Simpson & Douglas, 1998; Wilson & MacGillivray, 1998), although their influence is different from peer influence in nature and relative importance. Lachance et al. (2003) found that the influence of parents as consumer socialization agents affected expressive aspects of adolescence, such as developing social and materialistic motivations toward clothing. Parents' influence on the consumer socialization of

their offspring seemed to be a subtle process of social interaction rather than a conscious effort by the parents to educate their children. Engel, Blackwell, and Miniard (1995) indicate that family communication about purchase and consumer behavior is key in children's consumer socialization processes. Through interaction, parents' values naturally pass to the child. The influence from parental communication is a vital component of the adolescent's socialization process, which includes consumption of clothing and purchase behavior; therefore, parents' influence is necessary to examine.

Clothing Symbolism

Clothing is an important possession that contributes to adolescents' development of their self-concepts as they formulate or enhance the identity of the self (Daters, 1990; Eicher et al., 1991; Lachance et al., 2003). For thousands of years, human beings have communicated self-image through the nonverbal communication of dress (Lurie, 2000). When persons view others' clothing, they may not be able to put the information they obtain into words, but they register the information unconsciously to form a definition of a person's image. Dittmar and Pepper (1994) indicate that possessions could play a significant role in perceiving others in the context of their possessions and relative wealth; for example, clothing is a possession that can be used to establish a person's identity, project that identity to others, and control one's self-concept (Lachance et al., 2003). Consequently, adolescents' clothing possessions could influence their perception of their social standing, and in turn, their personal qualities (Dittmar & Pepper, 1994).

For adolescents, material possessions are especially pertinent. As adolescents are often in stages of uncertainty, gathering symbols is a way of establishing their identity and gaining much-needed prestige (Belk, 1988). Moreover, Belk (1985) indicates that possessions are a tool that could bring one closer to what he or she considers the ideal image. By using possessions, persons try to control their image to reach their ideal selves. Adolescents often use the symbolism of clothing to attach a certain image to themselves or to decipher the image of other adolescents. The effect of the symbolism of clothing varies by the person who is evaluating the symbolism, according to his or her self-concept (Sirgy, 1982a). Depending on a product's relationship to persons' actual or ideal self-concepts,

individuals might view a product as portraying particular symbols; for example, if a product reflects the actual self, the individual may attach negative images to the product because of unhappiness with the actual self, or if a product reflects one's ideal self, the individual may use the product as a tool to attain the ideal self-image.

Adolescents in American culture are frequently observed to engage in activities in which they reveal the psychological need to belong and be approved by others (Wilson & MacGillivray, 1998). Individuals learn at an early age how important appearance is to their success, their influence over others, and their efforts to reach a cultural ideal (Orenstein, 1994). Johnson and Lennon (1999) indicated that socially constructed ideas about clothing manifest themselves through the ways that individuals, as well as groups, form valuable networks through which conceptions of identity and self-concept are developed (Tarrant, 2002). Individuals and groups are also a source of instrumental and emotional support, offering a sense of belonging during periods of physical, psychological, and cognitive adjustment. The studies cited above have shown that, through clothing symbolism, an adolescent can identify her or his actual or ideal self, which can help define the adolescent's identity; therefore, it is important to examine the role of clothing symbolism in adolescents' clothing behavior.

Clothing Involvement

In the field of consumer behavior, researchers have made an important distinction between low and high levels of involvement with products (Day, Stafford, & Camacho, 1995). In judging products, highly involved consumers are likely to scrutinize product-relevant information. They engage in information search, see differentiation among brands, have complex choice processes, and are committed to certain brands (Kapferer & Laurent, 1985/1986; Zaichkowsky, 1985). They are less susceptible to persuasion than those who are less involved (Johnson & Eagly, 1989). They are also strongly influenced by reference groups and are motivated to comply with reference group pressures (Houston & Rothschild, 1978). Zaichkowsky (1985) proposed that, at a low level of product involvement, one participates in relatively little active information seeking about brands and little comparison

among product attributes; the individual perceives similarity among brands and has no special preference for a particular brand.

Vieria (2009) tested an extended theoretical model of fashion clothing involvement. Results indicated a significant and positive relation between materialism and fashion involvement. Age (i.e., younger versus older) had a significant negative influence on fashion clothing involvement. Younger persons placed more importance on their clothing than older persons. Fashion clothing involvement was associated with subjective fashion knowledge (i.e., how much consumers thought or perceived they knew about the fashion product). Consumers with a higher degree of clothing involvement perceived themselves as having a better knowledge in fashion products. The study also showed that the higher the involvement with fashion clothing, the higher the commitment that consumers would have in keeping their wardrobes up to date with trends. Fashion involvement and time spent shopping were significantly and positively related. Consumers with a higher degree of fashion involvement spend more time trying on and deciding the products to purchase in stores. This study showed that level of involvement impacts consumers' relationships with products, their information search process, and their purchase behavior. Young consumers had high involvement with clothing. Therefore, to understand adolescents' clothing behavior, it is important to understand the impact of clothing involvement.

Gaps in Literature

Today's high school adolescents are smart, bold, and determined, but under a great amount of pressure (Phillips, 1998). Many adolescents struggle with problems such as gender-related issues, depression, teen pregnancy, economic realities, and violence. Consequently, adolescents' needs and problems have been brought to the forefront of American media; for example, the motion picture *Mean Girls* (Messick &Waters, 2004) tackles the devastating distress that adolescent peers often cause each other. Newspapers increasingly run articles that address adolescents' lives and struggles. Bookstore shelves are rapidly becoming congested with new self-help books for teens, parents, and educators, such as *Dealing with the Stuff that Makes Life Tough: The 10 Things That Stress Teen Girls Out and How to Cope with Them* (Rutledge, 2003); *Freaks, Geeks, and Cool Kids: American*

Teenagers, Schools, and the Culture of Consumption (Milner, 2004); *The Friendship Crisis: Finding, Making, and Keeping Friends When You're Not a Kid Anymore* (Paul, 2004); *Girls' Guide to Friends: Straight Talk for Teens on Making Close Pals, Creating Lasting Ties, and Being an All-Around Great Friend* (Taylor, 2002); and *Success Express for Teens: 50 Activities That Will Change Your Life* (Leslie, 2004). The Internet also offers endless sites to help with adolescent social issues; examples are My Teen (2009) <helpmyteen.com>; Teen Control (2009) <www.teencentral.net>; and Teen Growth (2009) <www.teengrowth.com>.

Large amounts of literature on adolescents are dedicated to discussion and investigation of adolescents' social interactions (Chen-Yu & Seock, 2002; Childers & Rao, 1992; Daters, 1990; Eicher et al., 1991; Evans, 1964; Francis, 1992; Kaiser, 1996; Lachance et al., 2003; Maxwell, 2002: Milner, 2004: Orenstein, 1994; Shim & Koh, 1997; Tarrant, 2002; Wilson & MacGillivray, 1998); school violence (Furlong, 2000; Milner, 2004; Newman, Fox, Harding, Mehta & Roth, 2004); and adolescent depression (Daters, 1990; Flowers, 2002; Francis, 1992; Kwon, 1991; Orenstein, 1994). Many researchers have identified clothing as an important factor in adolescents' lives (Daters, 1990; Evans, 1964; Francis, 1992; Roach-Higgins & Eicher, 1992; Lachance et al., 2003; Quart, 2003; Shim &Koh, 1997; Tootelian & Gaedeke, 1992). Roach-Higgins and Eicher (1992), for example, explored clothing as a means of communication through which adolescents establish their own identities and incorporate identities in their selves based on assigned and achieved positions within social structures. The authors found that clothing was an effective means of communication during adolescents' social interaction. Most adolescent clothing behavior studies have focused on understanding adolescents' consumer behavior in the marketplace, such as adolescents' information sources (Francis, 1992; Martin & Bush, 2000; Roach-Higgins & Eicher, 1992), purchase and decision-making styles (Evans, 1964; Martin & Bush, 2000; Shim & Koh, 1997; Tootelian & Gaedeke, 1992), and brand sensitivity (Lachance et al., 2003; Milner, 2004; Quart, 2003). Other influences on adolescent clothing behavior require investigation to extend understanding of adolescents' clothing behaviors.

Reference Groups

Many studies have addressed the influence of peers on adolescents' behavior (Francis, 1992; Koester & May, 1985; Lessig & Park, 1978; Martin & Bush, 2000; Maxwell, 2002; Millem, 1998; Rubinstein, 2001; Tarrant, 2002; Wilson & MacGillivray, 1998; Yurchisin & Johnson, 2004) and the influence of parents on adolescents' behavior (Chen-Yu & Seock, 2002; Childers & Rao, 1992; Gilkison, 1973; Koester & May, 1985; Martin & Bush, 2000; Moore & Moschis, 1978; Wilson & MacGillivray, 1998). However, few studies have examined the influence of popular girls on adolescents' behavior (Owens & Duncan, 2009). In addition, no researcher has previously investigated adolescents' perceptions of the influence of reference groups on their purchase intentions and clothing behavior. The following three sections discuss the gap in the literature concerning the influence of three types of reference groups (i.e., peers, popular girls, and parents) on the clothing behavior of adolescents.

Peers' Influence

When adolescents enter high school, they usually move to schools larger than those they have previously attended, and they gain increased mobility (e.g., from having a driver's license) and engage in expanded communication through telephone, e-mail, the Internet, and other means. Both school time and leisure time are mostly spent with peers. Milner (2004) found that, in a typical week excluding time spent in classroom instruction, high school students spent twice as much time with peers than with parents or other adults. Given the large amount of time that adolescents spend with their peers, many researchers have analyzed the influence of peers on adolescents' behavior (Francis, 1992; Koester & May, 1985; Lessig & Park, 1978; Martin & Bush, 2000; Maxwell, 2002; Millem, 1998; Rubinstein, 2001; Tarrant, 2002; Wilson & MacGillivray, 1998; Yurchisin & Johnson, 2004). Most of these studies focused on establishing the importance and power of peer influence, types of peer influence, and the influence of peers on adolescents' consumer behavior; however, researchers have not investigated the relationship between adolescents' perception of their peers' clothing behavior and their own clothing behavior. Efforts to understand the relative impact of different socialization agents highlight the emergence of the dominant influence of peers and the waning influence of parents as children mature (Ward, 1974); however, few

studies have probed adolescents' perceptions of peer influences (John, 1999). It has been established that changes in adolescent's environment is part of a cumulative process by which adolescents become socialized, but whether adolescents' perceptions of peer influences have a significant impact on their own purchase intentions and clothing behavior has not been investigated and established. To fully understand adolescents' purchase decision process and their clothing behavior, it is imperative to conduct research on adolescents' views of their peers' possible impact on what they buy and wear.

Popular Girls' Influence

Few studies have addressed the influence of popular boys or girls on adolescents' behavior. A recent study by Owens and Duncan (2009) focused on group discussions among adolescent girls on the topic of popularity. A conclusion from this work was that adolescent girls see popularity as concerning public visibility, prominence, social power, and influence rather than likeability. The adolescent girls in the study were unanimous in their view that popular girls stood out from their peers through being pretty and fashionable. Many expressed the view that, relative to unpopular girls, popular girls had greater opportunity to be fashionable due to the wealth of their parents or at least having parents who provide money for fashionable clothes. Girls in the group discussion also expressed the view that popular girls are uniform in what they wear and the ways they present themselves. This perceived uniformity of dress and appearance enabled popular girls to be viewed as a distinct group. However, the authors of this study examined popularity among adolescent girls in general and did not investigate relationships between adolescents' perceptions of popular girls and their own purchase intentions and clothing behavior.

Parents' Influence

Parents also have a relationship with adolescents' behavior. Parents' relationships with adolescents have been defined and classified in a variety of studies (Cox, 1967; Engel et al., 1995; Mangleburg & Bristol, 1998). In addition, researchers have investigated the degree to which families influence adolescents' behaviors, such as conformity levels, cognitive responses, and attitudes (Chen-Yu & Seock, 2002; Childers & Rao, 1992; Gilkison, 1973; Koester & May, 1985; Martin & Bush, 2000; Moore & Moschis, 1978; Wilson &

MacGillivray, 1998), as well as the level of family influence in different cultures (Arnould, 1989; Childers & Rao, 1992; Mehta & Belk, 1991; Tremblay, 1990; Suvannathat, 1979). However, researchers have not investigated the relationship between adolescents' perceptions of their parents' opinions about clothing behavior and their own clothing behavior.

Clothing Symbolism

The importance of the symbolic properties of goods for adult consumers has been explored in depth, but less attention has gone to symbolic consumption by adolescents (Piacentini & Mailer, 2004). For many adolescents, especially those who feel they lack social and athletic skills, clothing often becomes a primary tool to help them feel confident with their physical appearance and thereby control self-image in order to reach their ideal image (Schouten, 1991). Adolescents quickly learn that clothing can help them control their image, aid in peer acceptance, recognition, approval, and build self-confidence and self-esteem. Consequently, they often devote large amounts of time, energy, and money to clothing (Stossel, 2003; Wood, 2002). Although researchers recognize that adolescents can use clothing as a tool to control self-image, none have previously investigated the relationship between adolescents' perceptions of clothing symbolism and their clothing behaviors.

Clothing Involvement

Another factor that may significantly influence adolescents' clothing behavior is clothing involvement. Involvement is the perceived relevance of an object to an individual based on the individual's inherent needs, values, and interests (Zaichowsky, 1985). Many studies have focused on defining product involvement (Bloch, 1986; Chaiken, 1980; Engel et al., 1995; Kapferer & Laurent, 1985), measuring involvement (McQuarrie & Munson, 1987; Zaichkowsky, 1985), and investigating influences on the degree of involvement such as product category, personal factors (e.g., inherent interests, values, and needs that motivate one toward an object), situational factors (e.g., factors that temporarily increase the relevance of an object or interest towards it), price, service, and stores (Bloch & Richins, 1983; Houston & Rothschild, 1978; Peter & Olson, 1987). Although some researchers have investigated the relationship between clothing involvement and clothing satisfaction and dissatisfaction (Chen-Yu, 1995; Francis, 1992) and between clothing involvement and

compulsive buying behavior (Lee, Lennon, & Rudd, 2000; Yurchisin & Johnson, 2004), none have previously examined the effects of clothing involvement on adolescents' clothing behavior.

Purpose and Objectives of the Study

The purpose of this research is to examine the relationship between each of three independent variables (i.e., reference groups, clothing symbolism, and clothing involvement) and adolescents' clothing purchase intentions and clothing behavior, and whether the three independent variables are predictors of adolescents' clothing purchase intentions and clothing behavior. Specifically, the study is designed to examine: (a) the relationship between the likelihood that adolescents will purchase particular outfits and their perceptions of reference groups' clothing behavior and opinions (i.e., perception of friends' clothing behavior, perception of popular girls' clothing behavior, perception of parents' opinions concerning clothing behavior); (b) the relationship between the likelihood that adolescents will wear particular outfits and their perceptions of reference groups' clothing behavior and opinions (i.e., perception of friends' clothing behavior, perception of popular girls' clothing behavior, perception of parents' opinions concerning clothing behavior); (c) the relationship between the likelihood that adolescents will purchase particular outfits and their clothing symbolism, that is, the degree of congruency between perceived images of the outfits and adolescents' actual and ideal self-concepts; and (d) the relationship between the likelihood that adolescents will wear particular outfits and their clothing symbolism, that is, the degree of congruency between perceived images of the outfits and adolescents' actual and ideal self-concepts; (e) the relationships between the likelihood that adolescents will purchase particular outfits and their clothing involvement with the particular outfits; and (f) the relationship between the likelihood that adolescents will wear particular outfits and their clothing involvement with the particular outfits.

Providing information about the influence of reference groups could help apparel marketers understand adolescents' sources of information for purchasing and wearing clothing. Such information could assist apparel companies in developing effective marketing strategies to promote their products. Findings of this study also could enhance apparel

marketers' knowledge of the adolescent consumer segment through improved understanding of how adolescents use clothing to develop their self-concepts, so that apparel companies can offer products that fulfill adolescents' desires to reach their ideal images. The guidance of educators and parents is essential as adolescents experiment with and learn the impact of their clothing on the expectations of others for their behavior in social roles. This study may provide information that can aid educators and parents in advising adolescents in their purchase decisions for clothing and helping adolescents achieve positive self-concepts through knowledge of the influence of reference groups, clothing symbolism, and clothing involvement.

Conceptual Definitions

Conceptual definitions of the independent and dependent variables in the study follow.

1. **Reference groups** are any person or group of people who significantly influences an individual's behavior (Bearden & Etzel, 1982).

2. **Clothing behavior** is the outfit that the consumer (adolescent female) usually wears for a specific occasion (Erickson, 1983). In the current study, the occasion is specified as the time when adolescent girls hang out with their friends.

3. **Perception of friends' clothing behavior** is the consumer's (adolescent female's) view of what her friends usually wear for a specific occasion (Currie, Wesley & Sutherland, 2008). In the current study, the occasion is specified as the time when adolescent girls hang out with their friends.

4. **Perception of popular girls' clothing behavior** is the consumer's (adolescent female's) view of what popular girls usually wear for a specific occasion (Owens & Duncan, 2009). In the current study, the occasion is specified as the time when adolescent girls hang out with their friends.

5. **Perception of parents' opinions concerning clothing behavior** is the consumer's (adolescent female's) view of the opinions of her parents or the adults in her household regarding what they usually like her to wear for a specific occasion (Currie et al., 2008).

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In the current study, the occasion is specified as the time when adolescent girls hang out with their friends.

6. **Clothing symbolism** is the consumer's (adolescent female's) use of garments as symbols to represent her actual self-concept and ideal self-concept (Erickson & Sirgy, 1992).

7. **Actual self and clothing image congruity** is the consistency between the consumer's (adolescent female's) clothing image perception and actual self-concept (Sirgy, 1982b).

8. **Ideal self and clothing image congruity** is the consistency between the consumer's (adolescent female's) clothing image perception and ideal self-concept (Sirgy, 1982b).

9. **Clothing involvement** is a state reflecting the amount of interest, arousal, or emotional attachment the consumer (adolescent female) has with clothing (Bloch, 1986).

10. **Clothing purchase intention** is the consumer's (adolescent female's) likelihood of purchasing apparel outfits (Cho, 2008).

CHAPTER II
LITERATURE REVIEW

This literature review chapter contains five sections. The first section, adolescents and their shopping behavior, describes adolescents' development, purchasing power, lifestyles, and shopping behavior. The second section, clothing symbolism, includes symbolic consumption (i.e., discussion of possessions as a tool to define oneself to control self-image, to classify social roles, and to characterize different life stages), theories related to clothing symbolism (i.e., symbolic interaction theory, symbolic self-completion theory, self and product image congruity theory, group identity theory), adolescents and clothing symbolism, and measures of clothing symbolism. The third section, reference groups, concerns definitions of reference groups, types of group influence (i.e., normative, informative, utilitarian, and value-expressive influence), theories related to reference-group relationships (i.e., consumer socialization theory, social comparison theory, social identity theory, conformity theory), adolescents and reference groups, and measures of reference group influence. The fourth section, involvement, addresses types of involvement (i.e., product involvement, purchase involvement), involvement levels (i.e., involvement levels and product categories, and consumer characteristics), adolescents and involvement, and measures of involvement. The fifth section provides a summary of the literature review.

Adolescents and Their Shopping Behaviors

During early adolescence (i.e., 12-14 years), adolescents begin a movement towards independence (Del Campo, 2007). Adolescents also struggle with their sense of identity and are more likely to express feelings by action than words; increasingly view close friendships as important; show little affection towards parents; express occasional rudeness; realize that parents are not perfect and identify parents' faults; and search for new persons to love in

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addition to parents. Peer groups begin to influence interests and clothing styles. Interests are mostly centered in the present and near future. Adolescents often display and participate in same-sex group activities and show-off qualities, and they worry about being normal.

During middle adolescence (i.e., 14-17 years), adolescents further the movement towards independence (Del Campo, 2007). Complaints that parents interfere with independence arise as adolescents explore their definitions of identity and independence. Adolescents today may perceive themselves as having spending and money management philosophies that differ from those of their parents (Alhabeeb, 1996). Extreme concern is exhibited regarding one's self and body. Opinions of parents are lowered and emotions are often withdrawn from parent(s). Effort is often directed to making new friends, with strong emphasis on peer groups. Relationships within one's peer group and with one's parents frequently change. In addition, the adolescent is exploring development of ideals, ethics, self-direction, and selection of role models.

In the United States (U.S.), the adolescent population began to decline in 1976 after the last baby boomers passed their adolescent years (Zollo, 1995). After 16 years of continuous decline, the adolescent population began to increase in 1992 because of the swell in the population of the children of baby boomers. In 1992, there were 28 million persons aged 12 to 19 in the U.S. In 2000, there were 40.7 million persons aged 12 to 19 in the U.S, 20.5 million aged 10 to 14 years, and 20.2 million aged 15 to 19 (U.S. Census Bureau, 2000). The adolescent population was expected to continue expanding until the year 2010. In July 2008, it was estimated that the U.S. population included 20.1 million persons aged 10 to 14 years and 21.5 million persons aged 15 to 19 years (U.S. Census Bureau, 2008). According to Lewis (2002), there were more than 40 million adolescent consumers, many with large disposable incomes. Tootelian and Gaedeke (1992) indicate that adolescents represent a sophisticated set of buyers of possessions. They have considerable sums of money, both from allowances and wages, and represent a large market of possession purchasers.

Although most adults earn more money than adolescents, a larger share of adolescent income is discretionary (Zollo, 1995). Adolescents are not saddled with mortgages or utility bills. They can spend their funds freely, and they have the means to affect brand sales in a big way. Also, U.S. adolescents today appear to be more brand conscious than ever before. Alhabeeb (1996) investigated how much money was obtained by U.S. adolescents and how it

was spent by adolescents. He found adolescents' average spending to be $16.72 a week, which is almost 81 percent of respondents' income, leaving 19 percent for savings, which averaged $3.98 a week. The entertainment category topped the list of spending at 29 percent of income. Clothing and personal care were next at 26 percent of income. Food, drink, and snacks were at 22 percent of income. Adolescents were found to increase their spending on clothing and personal care as they grow older. For example, a 15-year-old would spend $3.17 more on clothing and personal care than a 14-year-old. In 2007, Teenage Research Unlimited surveyed adolescents and found that, different from adolescents 10 years ago, adolescents today spend almost all of their money (98 percent), rather than saving it (Teens' Spending, 2007). In 2007, U.S. adolescent shoppers spent over $170 billion with average expenditures of $104 per week and $5,408 per year.

Today's U.S. adolescents have grown up in a consumer-oriented society in which consumption has become a leisure-time activity (Bush, Martin, & Bush, 2004; Syrett & Lammiman, 2004). Most adolescents see shopping as an experience rather than an errand, an event rather than a chore (Zollo, 1995). Bailey (1992) reported that adolescents spend about 82 percent of their income primarily on entertainment, clothing, cosmetics, and transportation. According to O'Neill (1992), adolescent employment appears, in many cases, to be motivated not by economic need, but by a desire for luxuries. In a more recent study, Kennedy (2004) indicated that adolescents have money and time to spend it just how they want. Nowadays, adolescents watch cable channels designed just for them, cruise the Internet with ease, know what they want, and often times obtain it.

Guiry, Magi, and Lutz (2006) have shown that shopping enthusiasts, or those consumers who are committed to recreational shopping as a rewarding activity, are likely to be young consumers. Children have listed "going shopping" as their second favorite after-school activity, with watching television being the first (Schulman & Clancy, 1992), and children as young as age 10 experienced an average of 250 shopping expeditions annually (Dotson & Hyatt, 1994). Many U.S. adolescent consumers have embraced the mall experience (Martin, 2009). Going to the mall to shop for clothes is a top activity for adolescents (Setlow, 2001). A 1994 national survey by America's Research Group revealed that an average adolescent visited the shopping mall at least eight times a month, and that nine out of ten adolescents made at least one purchase per visit spent an average of $33

(Alhabeeb, 1996). Many malls have begun to recognize the dollar potential associated with this generational cohort group and have developed regions within malls that are specifically designed for adolescent shoppers (McCartney, 2002).

Adolescents are more involved with product trends than probably any other age group today (Martin & Bush, 2000). Their likes and dislikes change faster than for any other consumer group (Public Broadcasting Service, 1999). For girls, fashion is of high importance. Zollo (1995) found that apparel was the most important product category to female adolescents; it consumed both the greatest proportion of their disposable income and their greatest parent-campaigning efforts. Boys also cared about fashion, but they spent less of their own money on it, preferring to convince their parents to buy clothes and shoes for them.

Adolescents are not only trendsetters for one another, but are also trendsetters for the population at large (Zollo, 1995). Blue jeans and rock music are just two examples of what can happen when adolescents embrace an idea. Adolescent influence extends beyond their own consumer segment because younger children look up to adolescents to identify and adopt the latest fashion, and adults often watch adolescents to spot what is "in." Trends in clothing and music often result from adolescents perceiving an idea or brand as cool. For many children, it is not just buying a pair of jeans, but buying GAP, Timmy Hilfiger, or Abercrombie & Fitch brand products. This "barrage of brand names offers the irresistible promise of instant cool," particularly for adolescents (Wechsler, 1997, p. 64). According to Zollo (1995), some of the top reasons that make a brand a "cool brand" among adolescents are: "quality," "it's for persons my age," "advertising," "if cool friends or peers use it," and "if a cool celebrity uses it." These responses suggest that advertising, peers, and celebrities/role models have the potential to contribute to brand choice among adolescents. Adolescents are often influenced by a variety of outside interests while adopting their own set of self-images, lifestyles, and consumption patterns (Martin & Bush, 2000).

In addition to mall shopping, adolescents are also shopping online (Dotson & Hyatt, 2005). Adolescents today have grown up in a society of technological change and they are technologically savvy (Belleau, Summers, Xu, & Pinal, 2007). They feel comfortable with the idea of transmitting information via a computer (Noble & Noble, 2000) because they have used the Internet since preschool. They are likely to go online for news, weather,

information, and research, as well as recreation and "human contact" through chat rooms. Adolescents today spend fewer hours watching television than the 18 to 49 age segment, and they spend more time online than any other demographic group. The National Institute on Media and the Family (2000) reported that 67 percent of online adolescents had researched or bought products online. According to Gunter (2004), 12 percent of American adolescents have their own credit cards, which allow them to easily shop on the Internet.

In Zollo's (1995) syndicated study, "Teenage Marketing & Lifestyle Study," the author reported the brands indicated by adolescents as the coolest were Nike, Guess, Levi's, Gap, and Sega, and they were all perceived by adolescents to be of high quality. The top brands were for apparel and shoes, reflecting the emotional importance to adolescents of wearing the right clothes and shoes. After quality, the most common cool qualifier was "for persons my age." Adolescents seemed to prefer things that were specifically for them, whether it was language, fashion, advertising, or brands. Celebrities can be effective in gaining adolescents' attention, in positioning a product to adolescents or an adolescent consumer segment, and in furthering a brand image, but celebrities alone cannot carry a brand.

Clothing Symbolism

Clothing can be defined as garments worn to cover the body and limbs, and symbolism can be defined as the use of symbols to represent ideas (*Illustrated Oxford Dictionary*, 2003); therefore, clothing symbolism is the use of garments worn to cover the body and limbs as a symbol to represent ideas. Gereluk (2008) defines symbolic clothing as a piece of clothing that signifies a part of an individual's identity. The clothing must have a clear, communicable intent that goes beyond merely making a fashion statement or a specific preference in style taste.

For thousands of years, human beings have communicated self-image through the non-verbal communication of clothing (Lurie, 2000). When persons view others' clothing, they may not be able to put the information they obtain into words, but they register the information unconsciously. Consequently, clothing is an important tool to shape one's self-image. Davis (1992) states that the primary purpose of clothing might once have been to

protect one from the elements, but clothing has come to share in the work of self-concept management, as have other self-communicative devices, because clothing can non-verbally provide clues or visual metaphors for self-identity; for example, clothes may be used to provide information such as status, occupation, attitude, opinions, and mood (Lurie, 2000). A hard-working architect may wear a tan corduroy suit with a business shirt and tie to reassure his clients that he is serious about his job. Sometimes the outer and inner layers of clothing can provide two different images; for example, a woman may wear a sensible gray suit for the outer layer to portray herself as a hard-working woman on one hand, and a frilly pink blouse for the inner layer to portray a frivolous and feminine woman on the other hand. Like any other language, the language of clothing varies, and each individual may interpret different self-images differently. Each person has his or her own clothing vocabulary and employs personal variations of tone and meaning.

Solomon and Rabolt (2004) state that a person might perceive her self-concept as positive or negative and may use clothing to portray her self-image in an attempt to reinforce a positive self-image or to change a negative self-image. A vice president of a large company, for example, may reinforce his positive self-concept by wearing business suits on a daily basis to work. On the other hand, a worker in a mailroom of a large corporation who has a negative self-concept may try to change his self-image by wearing business suits to work in hopes of attaining a positive self-image and a new position.

A symbol is complex and intricate in terms of the length between signifier and signified (Kaiser, 1997). A symbol differs from a signal. A signal is a relatively straightforward, easily interpreted sign that is based on a simple cognitive link between the signifier and the signified. The cognitive activity of symbolizing is required when more interpretation is needed because the appearance in question may convey meanings about values, beliefs, and emotions. These meanings are often hard to put into words, the codes are complex and variable, and concentration or conscious attention is required on the part of the perceiver. Accordingly, social interactions become critical as participants negotiate and renegotiate or socially construct and reconstruct meaning from symbols.

Symbolic Consumption

It is generally accepted by marketing and consumer researchers that individuals consume products and brands for their symbolic properties as much as for functional benefits (Elliott, 1999). Individuals use products and brands as materials with which to cultivate and preserve their identities. Consumer goods provide consumers with means to promote and maintain their identities because of symbolic meanings embedded in them (Leigh & Gabel, 1992). Contained within the symbolism are messages that an individual may wish to transmit to other socially significant persons.

Individuals use consumer goods and possessions in a number of ways. Various studies show that possessions are often used as a tool to define one's self. Persons also use possessions with the intent of bridging the gap between their actual and ideal selves, therefore gaining control over their self-images. Some studies show that possessions can be used as tools to define social roles. When possessions are placed in a context larger than just one person's self definition, symbolism from the possessions can be used as cues to one's social role. In addition, several studies show that possessions are used differently in different life stages. Possessions often help to characterize one's transition from one life stage to another and conjure memories of previous life stages.

Possessions – A Tool to Define Oneself

Individuals use goods as materials with which to create, foster, and develop their identities (Elliott & Wattanasuwan, 1998). Because a person's identity is abstract, she or he often uses tangible possessions such as a house, car, boat, jewelry, or jacket to gain feedback in hopes of defining the self. Quester, Karunaratna, and Goh (2000) indicate that ownership or usage of a particular product with a particular image is often consistent with a person's definition of his or her self-concept. As persons often choose friends with personalities similar to theirs, they choose products with characteristics that they view as aligned with their definition of self. Individuals try to symbolically project the "right" message about themselves by the products they purchase, based on personal traits with which they are comfortable and feelings that are inherent to them; for example, a woman may buy a certain perfume because the perfume reflects her personality definition, and a man may choose a particular model of automobile for the same reason.

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The meanings that acquired or utilized products have for individuals or the attitudes that individuals have toward the products help persons define themselves. People use symbolic meanings of products as whether individuals have outward expressions of self-concept and connection to society (Elliott, 1999). Depending on positive or negative attitudes toward products, they may attach different meanings to the products; therefore, each individual may use products in a different manner for self-definition. Some recent research into self-concept is based on the premise that consumers develop a sense of who they are over time through a long, continuous process of self-examination and observation. Thompson (1995) described the self-concept as a 'symbolic project' that is actively constructed and preserved through symbolic consumption behavior. Individuals can develop a repertoire of symbolic consumption objects that can be collectively used in the construction of self-identity.

Another way that possessions can be utilized to define one's self is the use of special possessions to reinforce a person's self-concept by connecting the person with the past. Persons keep items, such as their grandmothers' dressers, not because of the monetary value, but because they are reminders of loved ones (Kleine, Kleine, & Allen, 1995). Possessions can be positive or negative reminders of the past; for example, a photo may bring a positive memory of one's mother, but another photo may remind one of a negative divorce. Kleine et al. found that possessions could evoke strong attachment or have no effect at all; for example, a shirt could be a reminder of the day that one proposed to his wife, but a shirt may remind a person of nothing. Also, possessions can portray a desirable attachment or an undesirable attachment; for example, persons may wear suits that make them feel good about themselves because the suits remind them of the attachment to their first real jobs.

Persons often want to detach themselves, however, from possessions that remind them of their past selves, when they are aspiring to become something new. A possession demonstrating a desirable attachment can signify one's connection with others and help to narrate a part of her life that she wishes to remember; for example, a daughter's ring that her mother wore portrays her mother's love, and another person's piece of furniture reflects her family heritage, which are both desirable attachments. Strong attachments to possessions in different combinations can be used by individuals to tell their life stories, and these stories are important elements in defining one's self-concept. On the other hand, a least favorite

possession could aid the changing of one's self-concept by disconnecting her or him from a past or self-image no longer desired.

Possessions – A Tool to Control Self-image

Belk (1985) indicates that possessions can be a tool to bring one closer to her or his ideal image. Heath and Scott (1998) indicate that many purchases made by consumers are directly influenced by the image that individuals have of themselves. A person may buy a product because, among other factors, she or he feels the product enhances the self-image. On the other hand, persons may not buy a product or not shop at a particular store, if they feel these actions are not consistent with their perceptions of themselves. This notion is supported by the research results of Schouten (1991), who found that persons use everyday items, such as clothing, cosmetics, or exercise equipment, to avoid negative body images and gain control over their physical appearance. Thereby, persons used possessions as a means to control the self-image and reach the ideal image goals.

Tian, Bearden, and Hunter (2001) maintained that, due to Americans' search for personal identity through possessions, individualism has increased and bonds between persons with similar possessions have decreased. According to the theory of uniqueness, the need to see one's self as being different from other persons is aroused and competes with other motives in situations that threaten self-perception and uniqueness. Individuals attempt to reclaim and reduce negative effects on their self-esteem through self-distinguishing behaviors. Individuals fulfill their desire to be unique in a variety of ways including possession displays. Persons often use possessions to provide them with individualism in self-image and social image enhancement; for example, unique possessions, such as rare paintings, may be used to restore or reinforce a person's view of the self-image regarding uniqueness. To reestablish a unique identity, one may even discontinue the use of a possession if it becomes common.

Tatzel (2001) found that high self-monitors, individuals highly concerned with possessions, tend to be concerned with appearances; so they often use possessions for impression management. Mick (1990) found that individuals highly concerned with possessions tend to be socially anxious, self-conscious, and conforming. They not only consume more, but also consume differently than those not highly concerned with

possessions. They are more involved with status consumption and purchase more luxury goods and objects that have public rather than private visibility. Their possessions tend to be valued for their costliness, prestige, and public visibility. On the other hand, those who were less concerned with possessions are more apt to treasure possessions that bring pleasure, are associated with loved ones, and carry remembrances of relationships; for example, if one is less concerned with possessions, she treasures her experiences such as on a vacation, but those more concerned with possessions place higher emphasis on the tangible objects from their vacations such as photographs and mementos.

Possessions – A Tool to Classify Social Roles

Possessions are used in everyday social life as symbols of a person's self-concept. Solomon (1983) stated that possessions contribute to persons' structuring of social reality, self-concept, and behavior. A significant portion of the consumption of possessions is actually social behavior. Possessions are often placed within and assessed a larger context of social reality. Belk, Bahn, and Mayer (1982) argued that one of the most culturally universal phenomena is individuals' tendency to make inferences about others based on their choices of products. The process allows individuals to communicate non-verbally and to satisfy self-expression through product consumption and images. Consistent with other researchers' previous findings, Pelham and Wachsmuth (1995) found that individuals often use possessions to assess one's place in social reality. Persons employ possession symbolism to define social reality and to ensure that their behavior is appropriate to that reality. Persons often rely on social meanings of possessions as a guide to interpret others' social roles; jerseys are used to identify athletes, as are wedding bands to identify married persons.

The degree of product conspicuousness also influences the communication of self-identity messages through consumption symbols (Hwan Lee, 1990). Socially consumed products are utilized most often in instances of symbolic consumption (Hyatt, 1992), with consumers being likely to use products that are socially visible to others to communicate their identity (Hwan Lee, 1990). High perceived risk accompanies a high degree of social visibility. As product conspicuousness increases, an individual's own choices are increasingly likely to be contingent upon the consumption choices of socially significant others. In situations of high-perceived social risk, individuals are likely to anticipate the

likely evaluations of others and make consumption choices accordingly. It is therefore important for individuals to determine how other persons in their social group might interpret the meanings of certain products and brands (Ligas & Cotte, 1999). Individuals can then use the symbolic content of chosen consumption objects to reflect their affiliation or connection to a particular social group (Elliott & Wattanasuwan, 1998). Similarly, they might reject certain products on the basis of their symbolic meanings, if they are perceived to be incongruent with the consumption choices of significant referents (Elliott, 1999). In this way, symbolic purchasing behavior also encompasses aspects of reluctant consumer choice (Hogg, 1998).

Roach-Higgins and Eicher (1992) indicated that clothing, a product category with high social visibility, functions as an effective means of communication during social interaction, influencing persons' establishment of identities of themselves and others. Clothing often takes priority over verbal discourse in communicating identity, because it ordinarily sets the stage for subsequent verbal communication. Specific types and properties of clothing that communicate identity may change through time in response to economic, demographic, and other societal changes.

Kaiser (1997) investigated how clothing possessions could be used as a tool to help one classify social roles. The author described social roles as the roles a person occupies in social situations. Moreover society provides a "script" for one to follow in these roles. A person cast in a particular role then needs to visually conform his or her appearance to fit the role, facilitated by dressing in a costume that others have come to expect of a person in that role. According to role theory, described by Kaiser from a symbolic-integrationist perspective, persons acquire masks to adapt to certain roles or performances, and these masks shape our perceptions of self. One form of masks is clothing. Student athletes have two roles on campus; for example, they play both the role of an athlete and that of a student. Through clothes, such as a team jersey, they are able to adapt to their athlete role on the playing field. To adapt to the role as a student in the classroom, they wear clothes similar to other students on campus and not their jerseys.

Possessions can be used to embrace or distance a person from a social role. Role embracement refers to a close link between a particular role or performance and an identity, meaning that the role is likely integrated into one's self-concept; for example, a student may

continue to wear his team jersey outside of athletic events as a tool to help the student embrace his role as an athlete. On the other hand, role distance refers to a lack of inner identification with a role. Persons may desire to communicate roles that are not part of their identities by distancing themselves from certain roles. Kaiser gives the example of a young military recruit who may chose his own clothing instead of a military uniform during leisure hours to distance himself from his role as a military recruit.

Leigh and Gabel (1992) indicated that the symbolic properties of products also play an important role when persons enter new phases of their lives or take on new roles because during the role transition, persons tend to be insecure and feel uncertain about how to behave; therefore, they rely on the symbolic properties of goods to assist them in performing the desired role. Ambiguity and uncertainty about a new role leads to symbolic buying behavior.

Possessions – A Tool to Characterize Different Life Stages

Belk (1985) explored the different stages in life and how they affect materialism in relation to one's possessions and self-concept. The definition of an individual's self-concept changes over a lifetime as the individual changes. Different possessions are used in different time periods of one's self-concept. During adolescent years, an individual desires possessions that allow him or her to perform certain activities popular among adolescents; for example, stereo equipment allows listening to music. During middle age, possessions such as furniture or trophies become important as reminders of accomplishments or shared experiences. As persons age, their thoughts become less about the future and more about the past, and possessions are tools used to remember their past and claim their self-concepts (Tootelian & Gaedeke, 1992). Older generations see special possessions not just as sentimental objects, but as unique meaning bundles that revitalize their life stories (Price, Arnould, & Curasi, 2000) and therefore they tend to value photograph albums and memorabilia. During the childhood years, children often receive conflicting messages from their parents (Belk, 1985). On one hand, they are told to be unselfish, but on the other hand, the parents demonstrate possessive and selfish traits. Belk notes that many young adults see money and possessions as morally evil, whereas many older adults see money and possessions as a means of comfort and security as they are often part of the work force.

Adolescents, particularly in the West, tend to have a strong desire to communicate their maturity and adultness to their peers through consumption (Ozanne, 1992). Gathering material possessions is a way of establishing their identity and gaining much-needed prestige (Belk, 1988), especially at this time of identity crisis for many adolescents. For example, an adolescent girl may wear makeup and sexy outfits and an adolescent boy may drive a car to communicate adultness and gain much-needed prestige. Adolescents validate the symbolic meanings attached to consumption practices and experiences through lengthy elaboration (i.e., through discussion, description, and argument). The communication of symbolic meaning relies on the shared knowledge, languages, and understanding of others in the particular social group. For example, adolescents often discuss, analyze, and compare their new material possessions as a prime means of communication.

Theories related to Clothing Symbolism

This section introduces four theories related to clothing symbolism. They are symbolic interaction theory, symbolic self-completion theory, self and product image congruity theory, and group identity theory.

Symbolic Interaction Theory

Symbolic interaction theory is one of the major theoretical perspectives in sociology (Beach, Kincade, & Schofield-Tomschin, 2005; McClelland, 2000). This theory began with the work of German sociologist and economist Max Weber (1864-1920) and American philosopher George H. Meade (1931-1963), both of whom emphasized the subjective meaning of human behavior, the social process, and pragmatism (McClelland, 2000). Blumer (1969) introduced the term "symbolic interactionism" and formulated the most prominent version of the theory.

Symbolic interaction theory focuses on the subjective aspects of social life, rather than objective, macro-structural aspects of social systems (McClelland, 2000). Humans are pragmatic actors who must continually adjust their behavior to the actions of other actors. Persons can adjust to these actions because they are able to interpret these actions as symbolic objects. This process of adjustment is aided by one's ability to imaginatively rehearse alternative lines of action before one acts. The process is further aided by one's

ability to think about and react to one's own actions and even one's self as symbolic objects. Symbolic interaction theory emphasizes humans as active, creative participants who construct their social world, not as passive, conforming objects of socialization. Society consists of organized and patterned interactions among individuals.

Symbolic interaction theory has been used to study person-to-person impression formation and the influence of culture on human dress (e.g., Johnson, Yoo, Kim, & Lennon, 2008; Kaiser, 1990; Lennon & Davis, 1989). This theory provides insights that help clothing and textile researchers to understand how dress serves as a communication tool and plays a role in the establishment of personal identities. Stone (1962), using a symbolic interaction approach, argues that appearance is the phase of social interaction that establishes identifications of the participants. Appearance communicates one's social identities because persons have attached meaning to dress cues, such that specific cues are linked with specific identities.

Sociologists have viewed symbolic interaction theory as applicable to clothing usage when considering clothing from a theoretical perspective (Kaiser, 1990), and have focused on social processes related to how meanings are constructed and reconstructed in everyday life. For example, overalls and a cowboy hat might link one to an identity involving occupation on a farm, or a formal suit might link one to an identity involving a business occupation. However, after work, one may change into running shorts and running shoes, therefore reconstructing her or his identity and creating the identity of a "runner."

Symbolic Self-Completion Theory

Wicklund and Gollwitzer (1982) argue that many of the activities that individuals enact, such as purchasing possessions, are intended to substantiate their definition of themselves and clarify their identity. These acts are especially prevalent when individuals feel uncertain or threatened. Wicklund and Gollwitzer proposed the symbolic self-completion theory, indicating that an individual's sense of self is a collection of numerous characterizations of himself. They referred to each one of these characterizations as a self-definition, which could be based on a variety of personal attributes such as qualities related to one's self, capabilities possessed, or roles one plays. To feel a sense of completion, an individual's ideal self-definitions and actual self-definitions must be congruent, and she needs

others to acknowledge her particular self-definitions. Individuals will engage in self-symbolizing behavior, such as purchasing symbols, wearing symbols, or displaying symbols, with the expectation that others will recognize the symbols and comprehend their self-definitions.

According to the symbolic self-completion theory, an individual will continue to engage in self-symbolizing behavior until the individual feels that he has convinced others, and consequently himself, that he possesses the desired self-definition; for example, if an individual's ideal self-definition is "tough," he may buy symbols such as a leather jacket, boots, or a particular logo t-shirt and then wear and display the symbols until he perceives that he is recognized by others as "tough." Wicklund and Gollwitzer (1982) indicate that although most persons will evaluate themselves, some individuals do not stop to evaluate whether other members of society have acknowledged their self-symbolizing behavior efforts as either successful or unsuccessful, and they continue their self-symbolizing behaviors.

Researchers have shown that apparel and apparel-related items, such as shoes, accessories, and cosmetics, are often used as symbols in the process of symbolic self-completion because the tangible characteristics of apparel items and the high level of their communicative value makes them a perfect product category to help individuals reach the desired self (Belk, 1985; Lafferty & Dickey, 1980; Solomon & Douglas, 1987; Wicklund & Gollwitzer, 1982). To communicate the self-definition of doctor, an individual might wear a white lab coat, have a stethoscope tucked into the pocket of the lab coat, and wear a pager attached to a belt (Yurchisin & Johnson, 2004). According to the theory of symbolic self-completion, another individual (e.g., a patient) would need to observe the doctor and acknowledge that the person is a doctor for the doctor to feel that his or her communication of self-definition was successful.

Clothing allows consumers to express an identity in terms of their symbolic or expressive meanings (Hawkins, Best, & Coney, 1998). Evans (1964) examined adolescents' motivations for wearing clothing and found that recognition and conformity were the two most important motivations. Almost 50 percent of the adolescent respondents expressed that their most important motivation was the desire for recognition, and 38 percent indicated the desire to conform. Miles (1996) studied the nature of adolescents' identity formation in contemporary culture. The author investigated adolescents' motivations for buying tennis

shoes and found that the shoes were bought as fashion items rather than functional items. Certain brands of tennis shoes, usually at the expensive end of the price range, were seen as having status qualities that would affect the individuals' self-identity. Miles suggested that adolescent consumption performs the role of solidifying an individual's identity, and that peer relations are prioritized through consumption as a means of conforming to a communal identity of a desired group; for example, an adolescent may buy a pair of tennis shoes in hopes of conforming to a particular group's identity, instead of the functional purpose of obtaining proper exercise shoes.

Ledgerwood, Liviatan, and Carnevale (2007) extended symbolic self-completion theory, arguing that individuals engage in acts that are intended to substantiate the identity of their group and not only their own identity. In particular, individuals like to substantiate the identities or definitions of the groups to which they belong. Usually they perceive these groups favorably, perhaps conceptualizing their organization as productive, innovative, and successful, for example. When the group identity is threatened, individual members are likely to seek symbols that nullify this shortfall. They might, for instance, overestimate the value of professionals or contributions of the organization.

Self and Product Image Congruity Theory

What a consumer buys can be influenced by the image that the consumer has of herself or himself (Zinkham & Hong, 1991). Consumers use products to demonstrate their self-concepts (Sirgy, 1982a). Through the purchase and use of products, consumers define, maintain, and enhance their self-concepts. Because purchase and consumption are good vehicles for self-expression, consumers often buy products or brands that are perceived to be similar to their own self-concepts. Depending on individuals' relationship with a product and their self-concepts, they may have different evaluations of the symbolism of a product. Sirgy (1982b) suggests that different persons might view a product as portraying different symbols; for example, a product may relate to one's actual self, and he may attach negative symbolism to the product because of unhappiness with the actual self, or the product may relate to another person's ideal self, and he may use the product as a tool to attain the ideal self.

Sirgy (1982b) developed the self and product image congruity theory, which states that behavior is affected by the congruity or incongruity between self-image and product-

image as influenced by the activation and operation of self-consistency and self-esteem motivations. Sirgy relates self-consistency and self-esteem to congruity or incongruity between the product image and the actual and ideal self-images. Self-consistency influences the person to act in ways that are consistent with his actual self-image. Self-esteem enhances an individual's need to act in a manner that will increase his positive ideal self-image.

Sirgy (1982b) identifies four types of relationships between product image and a person's actual self-concept and ideal self-concept to evaluate a product's symbolism. The four types of relationships are: (a) positive self-congruity, (b) positive self-incongruity, (c) negative self-congruity, and (d) negative self-incongruity. Positive self-congruity occurs when an individual's perception of the image of a product is consistent with that person's actual self and ideal self. Erickson (1983) used the following example to explain positive self-congruity as identified by Sirgy. Suppose a woman sees herself as professional (i.e., her actual self-image), and she likes her professional image (i.e., her ideal self-image). Then, she sees a garment that she perceives as looking professional (i.e., her perception of the product image). The result is positive self-congruity, that is, consistency between the woman's product image and both her actual and ideal selves. Positive self-incongruity occurs when an individual's perception of the image of a product is consistent with that person's ideal self, but not with his/her actual self. Negative self-congruity occurs when the product image perception is consistent with a person's actual self, but not with his/her ideal self. Negative self-incongruity occurs when the product image perception is inconsistent with both a person's actual and ideal selves.

The four conditions identified by Sirgy (1982b) lead to different levels of acceptance of a product and motivations to purchase the product. Positive self-congruity determines the strongest level of purchase motivation, followed by positive self-incongruity, negative self-congruity, and then negative self-incongruity. Sirgy indicates that, as a result of the four conditions, a person will be motivated to purchase a positively perceived product to maintain a positive self-image or enhance her ideal self and, in contrast, a person will be motivated to avoid purchasing a negatively perceived product to prevent negative effects on her self-image.

Several studies based on the self and product image congruity theory have shown that self and product image congruence can affect consumers' product preferences and their

purchase intentions (Erickson, 1996; Mehta, 1999). Erickson's study involving European consumers related to an American automobile, the Ford Escort, showed that a relationship does exist between self and product image congruity and intention to purchase the automobile. The congruence between self-image and product-image was also positively related to consumers' product evaluations: The more similar a consumer's self-image to the brand's image, the more favorable her or his evaluation of that brand.

Self and product image congruence can also facilitate positive attitudes and satisfaction with brands. Jamal and Goode (2001) studied the effect of self and product image congruity on brand preference and satisfaction in the precious jewelry market in the United Kingdom. Results indicated that self and product image congruity was a strong predictor of consumers' brand preferences and a good predictor of consumer satisfaction. Respondents with higher levels of self and product image congruity were more likely to prefer the brand and enjoy higher levels of satisfaction with the brand than were those with lower levels of self and product image congruity. These results indicate that consumer products have significance that goes far beyond their utilitarian, functional, and commercial value. Consumers do not consume products only for their material utilities but also for the symbolic meaning of the products as portrayed in their images. On the basis of the results, Jamal and Good (2001) discussed methods and implications for brand managers so that they can position their brands in an effective manner. In today's highly competitive business environment, the way a brand is positioned in terms of its image is extremely important. Brand managers can significantly improve the effectiveness of their brand positioning strategies by measuring the image of their brands and self-images of their target audience. Graeff (1996), who argued that brand managers can manage the effects of image congruence, made similar arguments about consumers' evaluation of brands and advertising. Brand managers can develop advertising messages that encourage consumers to think about their self-images. This is because advertising appeals that are congruent with viewers' self-concept are likely to be superior to incongruent appeals in terms of enhancing advertising effectiveness.

Based on the four types of relationships between product image and a person's actual self-concept and ideal self-concept identified by Sirgy (1982b), Erickson (1983) proposed that women would most often wear outfits to work that have positive self-congruity, followed

by outfits with positive self-incongruity or negative self-congruity, and then negative self-incongruity. Her analysis showed that outfits with business-like, casual, and sexy images followed the expected order, although feminine and collegiate outfits did not. For the outfit with a business-like image, respondents who displayed positive self-congruity with the business outfit (i.e., those who viewed the business-like outfit as congruent with their actual and ideal selves) said they wore such an outfit to work most of the time. Respondents who had positive self-incongruity with this outfit (i.e. those who did not view the business image to match the actual self, but desired to be like the business image) said they were willing to wear business-like outfits more than did those who had negative congruity followed by negative incongruity.

Results for the outfit with a casual image were like those for the outfit with a business-like image. Respondents who displayed positive self-congruity with the casual outfit (i.e., those who viewed the casual outfit as congruent with their actual and ideal selves) said they wore such an outfit to work most of the time. Respondents who had positive self-incongruity for this outfit (i.e. those who did not view the casual image as matching the actual self, but desired to be like the casual image) said they were willing to wear casual outfits more than did those who had negative congruity followed by negative incongruity. The ideal self-image appeared to be more important than the actual self-image for the business-like and casual outfits.

In the Erickson (1983) study, respondents said they wore the sexy-image outfit least often to work. The few respondents who said they wore this outfit to work were found to have positive self-congruity with this outfit. Different from the business-like, casual, and sexy outfits, respondents who had positive incongruity for the feminine-image outfit (i.e., those who did not view the feminine image as congruent with the actual self, but did desire to be like the feminine image) said they wore such an outfit to work most of the time. Respondents who had positive self-congruity for this outfit (i.e., those who viewed the feminine-image outfit as congruent with their actual and ideal selves) said they were more willing to wear feminine outfits than did those who had negative congruity followed by negative incongruity. These results suggest that those respondents who felt their actual self was not as feminine as they desired would wear the feminine-image outfit more often than those who felt the actual self was similar to the ideal feminine image.

Finally, respondents who had negative self-congruity for the collegiate-image outfit (i.e., those who saw themselves as collegiate but preferred not to project that image) said they wore the outfit to work most of the time. It is possible that although these respondents did not like to have the collegiate image, they still felt most comfortable wearing an outfit with an image consistent with the actual self. Respondents who had positive self-congruity for this outfit (i.e., those who viewed the collegiate-image outfit as congruent with their actual and ideal selves) indicated they were more willing to wear the collegiate outfit than did those who had negative incongruity followed by positive incongruity. These results showed that respondents who desired to have a collegiate image, but whose actual self was not congruent with the collegiate image, would avoid wearing the collegiate-image outfit. It is possible that those who desired to have a collegiate image, but felt the actual self was not congruent with this image, were persons who believed that wearing a collegiate image outfit to work was not appropriate for them. According to these results, Erickson (1983) concluded that it is possible to use the self-image/clothing-image congruity theory to predict the clothing a woman wears to work.

Group Identity Theory

Value placed on material symbols (e.g., garments) depends on commitment to group identity, the extent to which a symbol can be used to represent in-group identity, and situational variability in goal strength induced through group-identity affirmation or threat. Building on symbolic self-completion theory, Ledgerwood, Liviatan, and Carnevale (2007) conceptualized group identity as a goal toward which group members strive, using material symbols of that identity. Just as individuals strive to attain all the qualities of a chosen personal identity (Gollwitzer & Kirchhof, 1998), group members may want their group to possess all the defining features of the group identity. Ledgerwood et al. (2007) indicate that group members seek to communicate their group identity to others through socially recognized symbols, just as individuals self-symbolize to communicate personal identities. Group members should therefore value property or possessions that serve as symbolic means by which a group-identity goal can be pursued. Thus, whereas a symbolic self-completion account suggests that individuals value personal attributes or objects insofar as they help to symbolize a personal identity, a group-completion account broadens this focus to suggest that

group members should value attributes or objects possessed by the group as a whole, insofar as these can serve to communicate the group's identity to others.

Ledgerwood et al. (2007) examined social sources of valuations by considering property as a symbolic means by which group-identity goals are pursued. The authors' findings suggested that property derives value from its capacity to serve as an effective means in the pursuit of group-identity goals. The value placed on potential group-identity symbols varies depending on personal and situational factors influencing the strength of a group-identity goal. In addition, the results expanded the literature on symbolic self-completion by suggesting that individuals are motivated to pursue not only personal-identity goals, but also group-identity goals, and that both kinds of goals are pursued through the means of identity symbolization. This evidence for group-identity completion adds to current understanding of group identity as a psychological construct. Although group identity can certainly provide an important source of self-esteem, it can also act as a goal in and of itself.

Adolescents and Clothing Symbolism

Elliott and Leonard (2004) explored attitudes towards fashion brands for trainers/athletic shoes and their symbolic meanings among a sample of 30 children aged 8 to 12 years from poor homes in the UK. The authors found that the children formed stereotypes about the owners of trainers. If the trainers were obviously branded and expensive, the children perceived the owner to be rich and young. If the trainer was unbranded and inexpensive looking, the children perceived the owner to be poor and old. If a child was wearing branded trainers, he or she was seen as popular and able to fit in with peers. These opinions were so strongly held that the children preferred to talk to someone wearing branded trainers over someone wearing unbranded trainers. The children also felt pressure to wear the trainers that their friends wore, partly to make friends and fit in and partly because of the teasing experienced, if they were wearing unbranded clothes or were clearly from poor homes.

Piacentini and Mailer (2004) explored the subject of symbolic consumption with specific reference to clothing in the adolescent market. The goal of the study was to learn more about the ways in which young persons use clothing and to develop an understanding of why they use these symbols in these ways. Thirty-eight adolescents were interviewed, and

age, sex, and social position variations were considered. Results of the study suggested that conspicuous consumption (i.e., lavish spending on goods and services acquired mainly for the purpose of displaying income or wealth) was relevant to adolescents, and adolescents were a group that was adept at reading the signals represented in clothing choices. The authors found that the clothing choices made by young persons were closely bound to their self-concepts, and were used both as a means of self-expression and as a way of judging the persons and situations they face. Evidence was also found that clothing has a function in role fulfillment, giving the wearer increased confidence and a feeling of increased capability. Overall, clothing could be viewed as an essential social tool in the lives of adolescents.

Measures of Clothing Symbolism

Researchers have used various methods to evaluate clothing symbolism. Most researchers have used individual interviews for qualitative studies, and only a few have developed instruments for quantitative studies. Individual interviews, the role symbol scale, and self-image/product-image congruity to evaluate the symbolism of a product are discussed in the following section.

Individual Interviews

Piacentini and Mailer (2004) aimed to discover how adolescents use the symbolic properties of clothes and brands and to develop an understanding of why they use goods to convey symbolic meanings. The authors conducted individual interviews for data collection. A topic guide, developed from the literature review, was used to cover the main themes, and a list of possible questions was identified to explore each topic. During each interview, the interviewer adopted an active listening approach, reacting and responding to the particular issues raised. Prompts and probing were used to encourage elaboration. Third-person projective techniques (i.e., requiring the respondents to give opinions of other persons' actions, feelings, or attitudes) were also used in an attempt to prompt the participants to project their feelings into situations. Systematic coding via content analysis was used in data analysis. A coding scheme was created from the conceptual framework along with research questions stemming from the literature. This scheme was expanded as the analysis progressed, with emergent concepts coded and included. The systematic approach to coding,

combined with an inductive element, led to a comprehensive coding scheme that was context sensitive.

Elliott and Leonard (2004) also used individual interviews to conduct an interpretive study using projective methods to investigate the attitudes of children aged 8 to 12 years towards brands of trainers/athletic shoes. In interpretive studies, researchers assume that persons create and associate their own subjective and inter-subjective meanings as they interact with the world around them. Interpretive researchers attempt to understand phenomena through accessing the meanings that participants assign to them. Projective methods are unstructured prompts or stimuli that encourage the participant to project her or his underlying motivations, beliefs, attitudes, or feelings onto an uncertain situation. In this study, the children were first asked what brands of trainers they had and which ones were their favorites. This gave an overview of the children's brand awareness and which trainers they desired. Then, pictures of trainers were used as a stimulus. The children were asked to choose a trainer they liked the most and one they liked the least, and to comment on who might wear them. The interviews were informal and unstructured. All children were asked the same questions, but when an interesting topic came up, additional questions were asked to gather further information.

Role Symbol Scale

Lafferty and Dickey (1980) developed the role symbol scale, a Likert-type scale to measure nurses' attitudes toward traditional role symbols. In this study, traditional role symbols referred to the nurses' white uniform, school pin, and school cap. A total of 39 statements were included to measure whether respondents considered that these three items carried the symbols of professionalism, utilitarianism, self-identity, and traditionalism, and whether these items had the function of role identification and status differentiation. Results revealed three constructs among the 39 statements, and the overall reliability using Cronbach alpha was computed for each of the three constructs: .95 for Role Symbol, .82 for Nurse Autonomy, and .78 for Rejection of Traditional Role Limitation.

Self-Image/Product-Image Congruity Measure

Erickson and Sirgy (1992), based on Sirgy's (1982a) self-image/product-image congruity theory, investigated the relationship between self-concept/image and professional clothing image. To measure the clothing image, the authors first selected illustrations of clothing styles that represented a continuum of clothing, from styles that were generally considered appropriate for work to styles that usually were not considered appropriate. A group of women who worked in business and academia were shown the illustrations and asked to write one-word descriptions of each. Frequency counts were made of the responses, and interterm consistence was tested to insure that each outfit had a well-defined image. Five of the styles were found to have a distinct image: feminine, business like, casual, sexy, or collegiate. The outfits were translated into black and white line drawings depicting the front view of each costume. The pose, hairstyle, and facial features were controlled to be the same. Three adjectives were used to measure the clothing image of each outfit, resulting in a total of 15 clothing image measures (3 adjectives x 5 outfits = 15 clothing image measures). The three adjectives for the feminine costume were feminine, womanly, and delicate; the adjectives for the business-like costume were business-like, professional, and efficient; the adjectives for the casual costume were casual, relaxed, and easygoing; the adjectives for the sexy costume were sexy, sensuous, and slinky; and finally, the adjectives for the collegiate costume were collegiate, preppy, and youthful. Reliability of the clothing image measure was assessed using Cronbach's alpha. The alpha coefficients for the outfits were: feminine = .43; business-like = .89; casual = .73; sexy = .84; and collegiate = .79.

To measure actual self-image, a list of adjectives (e.g., feminine, womanly, delicate) was used that was the same as that in the clothing image measure. A Likert-type scale with values ranging from strongly disagree (1) to strongly agree (5) was used. Each respondent rated the extent to which each of the 15 **i**mage measures represented how she actually saw herself. The alpha coefficients for the five image dimensions measuring actual self-image were: feminine = .54; business-like = .75; casual = .70; sexy = .70; and collegiate = .60.

The ideal self-image measure was similarly developed. Each respondent rated the extent to which each of the 15 image attributes represented how she would like to see herself. The alpha coefficients for the ideal image measures were: feminine = .59; business-like = .76; casual = .75, sexy = .79; and collegiate = .50.

To compute a self-image and clothing image congruity score for each respondent, the researchers used a mathematical index involving a sum of the absolute arithmetical difference between the scores for the actual self-image measure and the scores for the clothing image measure. The ideal self-image and clothing image congruity scores were calculated by summing the absolute arithmetical difference between the scores for the ideal self-image measure and the scores for the clothing image measure.

Reference Groups

Reference groups are a source of instrumental and emotional support, offering a sense of belonging during periods of physical, emotional, and cognitive adjustment. Persons protect and modify their self-concepts in their interactions with others in reference groups. What persons think of their self-concepts is influenced by their social interactions with others whose values they share and opinions they respect. Persons often maintain their self-concepts by conforming to roles they have learned in reference groups. Advertising companies often take advantage of this concept by using testimonials from respected actors, politicians, or sports figures. This practice is assumed to be consistent with the idealized self of the consumer in the target audience (Blackwell, Miniard, & Engel, 2001; Childers & Rao, 1992). In addition, reference groups and family are aspects of the micro social environment for consumers (Peter & Olson, 2005). Social interactions with reference groups and family are often direct and face to face, often having immediate influence on consumers' cognitive, affective, and behavioral responses to marketing strategies. For instance, the social environment created when two friends shop together can influence each person's shopping experience, decision processes, and overall satisfaction with a purchase. Reference groups and family are important in transmitting cultural meaning in the overall society, subcultures, and social class to individual consumers.

Definition of Reference Groups

The term "reference group" refers to a group to which an individual orients himself or herself, regardless of whether the individual is actually a member of the group (Blackwell et al., 2001). In a related vein, Tarrant (2002) views reference groups as valuable networks

through which conceptions of identity and self-concept are developed. An individual may be involved in many different types of groups. A group consists of two or more persons who interact with each other to accomplish a goal (Blackwell et al., 2001). Important groups include family, close personal friends, co-workers, formal social groups, leisure or hobby groups, and neighbors. Some of these groups may become reference groups. A reference group involves one or more persons whom someone uses a basis for compassion or point of reference in forming affective and cognitive responses and performing behaviors. Reference groups can be any size and may be tangible (i.e., actual persons) or intangible and symbolic (e.g., successful business executives or sports heroes). Persons' reference groups may be from the same or other social classes, subcultures, and even cultures. Most consumer research has focused on two primary, informal groups: peers and family.

Types of Group Influence

Four primary types of group influence individuals' self-concept, including normative influence, informative influence, utilitarian influence, and value-expressive influence. These types of influence are discussed in the following sections.

Normative Influence

Normative influence manifests when individuals alter their behaviors or beliefs to meet the expectations of a particular group (Blackwell et al., 2001). Normative reference groups are often used as a source to define one's personal norms, attitudes, and values; for example, a group's norms may influence what one wears or what type of car one drives. Families have a large normative influence on the development of individuals' self-concepts. Childers and Rao (1992) found that the degree to which nuclear families (i.e., the immediate group of father, mother, and child or children living together) influence individuals' consumer behavior appears to be significantly higher for private products (e.g., toothpaste, underwear) than for public products (e.g., sweats, jackets). Also, the authors found that the degree to which extended family members (i.e., grandparents, uncles, aunts, cousins, and parents-in-law) influence individuals' consumer behavior appears to be significantly higher for public goods than for private goods. Because extended family members often do not live with the nuclear family, they would only be privy to the goods a nuclear family member

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displays to the public outside the home. Mangleburg, Grewal, and Bristol (1997) examined how various aspects of the consumer socialization process affect male and female adolescents' tendencies to use product labels. The authors found that parents are an especially important source of consumer learning. Exposure to marketplace communication with parents positively affects teens' tendencies to use product labels.

Research has also shown that peer groups have a large normative influence on their group members. Millem (1998) investigated peer-group influence on college students' attitudes and found that student behavior generally depended on the reaction (i.e., acceptance or rejection) of fellow students, rather than on the reactions of other groups, such as faculty. The students in this research had both mutual and reciprocal influences on each other. Peer-group acceptance induced a greater sense of belonging than did acceptance by faculty. Through interaction with each other, peers developed consensual and shared sets of expectations regarding each other's behavior and regarding important aspects of their common environment. Such consensual, shared expectations, which are known as norms and standards, formed the basis of the student peer groups' power over individual members. Hsieh, Chiu, and Lin (2006) examined the degree to which family communication affects the transmission of brand attitudes from parents to children. Results showed that fathers have a strong normative influence on children's brand attitudes. Fathers try to maintain a harmonious atmosphere at home by establishing norms and standards for the children to follow and encourage proper normative behavior. They also influence children's perceptions of specific brands.

Maxwell (2002) indicated that peer norms help determine whether adolescents consider a behavior or value as "hip," "safe," or "desirable". The author found correlations between normative expectations for an activity, such as smoking, and individuals' choices of whether to smoke. The roles of peer influence on behavior and values depend upon an activity's characteristics. Cigarette smoking, for example, is an activity that is easily done alone. In comparison, drinking alcohol and chewing tobacco are more social-group based activities, whose prevalence may be affected by large-group norms. Alcohol is often used at parties, and tobacco chewing is associated with team sports; so if the members of one's peer group do not engage in these activities, one may be unlikely to engage in these activities as a result of the group influence.

Due to the large influence that peers can have on an individual, advertisers often use peer endorsements to take advantage of this influence (Sorum, Grape, & Silvera, 2003). Typically, a peer endorser has an apparent personal and/or demographic similarity to the marketing target group. The intended purpose of this type of endorsement is to create a heightened sense of familiarity in the target group. Endorsers who are seen as similar to one's self are better liked and viewed as more competent than endorsers not seen as similar. It is likely that the target group will see the similar endorsers as credible, making the advertisements persuasive. Consumers are willing to accept a product recommended by peer endorsers whom they see as similar to themselves.

Although family referents and peers are significant normative influents, the degree of influence may differ from culture to culture. Childers and Rao (1992) found a higher degree of peer influence than of family influence on U.S. consumers' product and brand decisions; however, the authors' investigation in Thai culture revealed that the relatively larger number and variety of family members in the Thai case than in the U.S. case generated stronger family influences than peer influences.

Informative Influence

The informational function of reference groups imposes no norms on the individual (Lessig & Park, 1978). Information from reference groups can be influential if an individual internalizes the information upon perceiving it as enhancing his knowledge about his environment and/or his ability to cope with some aspect of the environment; thus, the more an individual feels uncertainty associated with a purchase and/or lacks relevant purchase-related experience, the more likely he will accept information from a reference group as evidence of reality.

Informative influence plays an important role in consumer behavior. It transmits useful information to consumers about themselves, other persons, or aspects of the physical environment such as products, services, and stores (Peter & Olson, 2005). This information may be conveyed directly, either verbally or by direct demonstration. Consumers tend to be influenced by reference groups because information is perceived as reliable and relevant to the problem at hand, and the information source is perceived to be trustworthy. Highly credible reference groups are likely to have informational influence on consumers. Thus,

some marketers hire recognized experts to endorse a product and tell consumers why it is superior. Information can also be obtained indirectly through vicarious observation. Observation occurs whenever a learner watches or listens to someone else "doing" something that is related to what they are learning (Fink, 1999).

Information can be transmitted from reference groups to consumers in different modes (Lessig & Park, 1978). One mode is when a consumer actively searches for information from a reference group with appropriate expertise; for example, information on product characteristics could be obtained directly from knowledgeable friends who have relevant product-related experience. Another mode is when a consumer makes inferences based on the observation of others' behavior; for example, an adolescent may decide to purchase a particular brand of jeans because his or her peers wear jeans of that brand. The individual may infer that the jeans are "cool" because his or her peers are cool. A third mode is when a consumer makes inferences about product characteristics, such as a brand's quality, by observing an individual's or group's endorsement. One may decide to purchase a given brand of athletic shoes endorsed by a famous football player or football association.

Mangleburg, Doney, and Bristol (2004) examined the phenomenon of adolescents' shopping with friends. The authors developed a conceptual model, hypothesizing that the greater the perception of a friend's knowledge of marketing phenomena relative to the adolescent, the more susceptible the teen will be to a friend's informational influence; adolescents' age will be negatively associated with susceptibility to informational influence from friends; adolescents' susceptibility to informational influence from friends will be positively associated with adolescents' enjoyment from shopping with friends; and adolescents' susceptibility to informational influence from friends will be positively associated with adolescents' tendencies to shop often with friends. Results, based on data from a sample of high school students, supported all the proposed hypotheses in the model.

In addition to peers, parents are an important source of information about the marketplace and products. Bush, Smith, and Martin (1999) found that parental communication about consumption-related activities is related positively to attitude toward advertising. Parents played a major role in shaping adolescents' general attitudes toward advertising. Adolescents learned consumer skills from parents. Mangleburg et al. (1997) also found that family communication increased adolescents' usage of product label information.

Exposure to marketplace communication with parents positively affects adolescents' tendencies to use product labels. Parents' marketplace-related communication was found to have the strongest effects on adolescents' learning, suggesting that parents are an especially important source of consumer learning.

Utilitarian Influence

Utilitarian reference groups' influence on consumers' behaviors occurs when the reference group controls important rewards and punishments (Peter & Olson, 2005). Consumers usually will comply with the desires of a reference group if they believe the group can control rewards and punishments, the behavior is visible or known to the group, and they are motivated to obtain rewards or avoid punishments. In some work groups (e.g. a formal, membership reference group), persons are expected to wear formal business suits, whereas other work groups encourage casual dress. Rewards and punishments may be tangible consequences or psychological and social consequences. Peer groups often administer psychosocial rewards and punishments for adherence to or violations of the reference group code. Wooten (2006) explored ridicule as a mechanism through which adolescents exchange information about consumption norms and values. The author found that adolescents use ridicule to ostracize, haze, or admonish peers who violate consumption norms. Adolescents learned stereotypes of avoidance groups, consumption norms of aspirational groups, the use of possessions to communicate social linkages and achieve acceptance goals, and social consequences of nonconformity. As a result, frequent ridicule alters adolescents' perceptions, acquisition, use, and disposition of objects in order to avoid unwanted attention. After being picked on/ridiculed or watching others being picked on/ridiculed, many adolescents change their perceptions of objects, such as clothing, to avoid unwanted attention.

According to Lachance, Beaudoin, and Robitaille (2003), peers are the most important agent in developing brand sensitivity in apparel, confirming the huge importance of friends and pals during adolescence and the role that clothes seem to play in relationships with them. Because clothes can be classified as public luxuries, the nature of prestigious brands of clothing and shoes increases the likelihood that peers affect the purchase of products with these brands. Also, adolescents shop more often for clothes with friends than

with other persons. Brand names can be instrumental in helping adolescents gain acceptance. One consequence of social pressure to fit the norms of peer groups is wearing clothing with the right brand names. Indeed, most of the time, clothing products with prestigious brands are expensive, and adolescents' brand sensitivity makes the desired clothes difficult to substitute. Adolescents do not want or need any windbreaker; they need a particular windbreaker with a specific popular, prestigious brand. All these pressures can have a negative impact on parent-adolescent communication or relationship. As clothing seems to be one of the sources of greatest conflict between adolescents and parents, it is possible that repeating or insistent demands from adolescents for products with particular brand names and negative reactions or refusal from parents can generate tensions or even conflicts in the household.

Value-Expressive Influence

Value-expressive influence occurs when a need exists for psychological association with an inspirational group (Blackwell et al., 2001). Blackwell et al. define aspirational groups as groups whose norms, values, and behavior an individual exhibits desire to adopt and with whom the individual aspires to associate. On occasion, the individual anticipates acceptance into membership and is motivated to behave accordingly; at other times, the individual has no expectation of ever belonging to the group, which makes the aspiration symbolic. The influence of aspirational groups, though often indirect, can play a significant role in product choices. For example, a child training in soccer might wear the colors and emblems of her favorite soccer team, or a business student might wear suits similar to those worn by successful business leaders, especially during pre-graduation job recruiting.

Even though an individual may have no motivation to become a member of the value-expressive reference group, the individual may believe that she or he can enhance his or her image in the eyes of others, or may seek to achieve identification with persons who are admired and respected, by emulating the behavior of the value-expressive reference group. Therefore, value-expressive reference groups can affect persons' self-concepts (Peter & Olson, 2005). As cultural units, reference groups both contain and create cultural meanings (i.e., beliefs, values, goals, behavioral norms, lifestyles). Persons constantly seek desirable cultural meanings to use in constructing, enhancing, or maintaining their self-concepts. By identifying and affiliating with certain reference groups that express these desired meanings,

consumers can draw out some of these meanings and use them in their own self-construction projects.

The identification process proposed by Kelman (1961) can be used to describe the value-expressive group function. An individual motivated to enhance or support his self-concept could associate himself with positive referents or dissociate himself from negative referents, meaning that he would utilize a value-expressive reference group for expressing himself and/or for bolstering his ego to the outside world. Kelman considers the degree of cohesiveness or norm specificity of the reference group not to be important, but instead places importance on the psychological image of the value-expressive reference group.

Escalas and Bettman (2005) argued that consumers appropriate brand meanings emerging from associations of brands with reference groups to construct their self-concepts. The authors' research showed that consumers report higher self-brand connections when brands have images that are consistent with the image of an in-group than they do when brands have images that are inconsistent with the image of an in-group. These findings are consistent with the brand congruency findings of previous consumer research on value-expressive social influence; that is, consumers use brands whose images match reference groups to which they belong to establish a psychological association with those groups. This concept has been applied to brand promotion. Advertisers have made a number of well-known attempts to use the value-expressive reference group function in promotions, examples being the "young generation" concept promoted by Pepsi and the "sophisticated and liberated woman" concept promoted for Virginia Slims cigarettes (Blackwell et al., 2001).

Theories Related to Reference Groups

Several theories address the role of reference groups in the development of self-concept. Four theories, consumer socialization theory, social comparison theory, social identity theory, and conformity theory, are discussed in the following sections.

<u>Consumer Socialization Theory</u>

Kaiser (1997) defines socialization as the process by which individuals become socially adjusted to the standards and values of the community and society. Palan (2001) defines socialization as an adult-initiated process by which children acquire habits and values congruent with their culture through development, insight, training, and imitation. Ward (1974) refers to socialization of consumers as the process of learning consumer-related skills, knowledge, and attitudes. Consumer socialization theory explains the processes by which young persons acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace, for example, skills in budgeting, knowledge of brands and shopping outlets, and attitudes toward products, brands, and sales persons. Consumer role enactment may occur during the physical act of purchasing, or consumer role enactment can refer to the set of physical and mental activities specifically involved in purchase decisions (e.g., shopping, talking to others about products and brands, or weighing purchase criteria). At such times, skills, knowledge, and attitudes directly relevant to the transaction are useful.

John (1999) proposes that consumer socialization can be viewed as progressing through a series of three stages that capture major shifts from preschool years through adolescence. The perceptual stage (i.e., ages 3-7) is characterized by a general orientation toward the immediate and readily observable perceptual features of the marketplace. Characteristics of knowledge structures include a concrete orientation, a perceptual focus, one-dimensional complexity level, and an egocentric (i.e., own viewpoint) perspective. Characteristics of decision-making strategies include expedient orientation, perceptual and salient focus, single attributes, and limited repertoire of strategies in relation to complexity, emerging adaptivity, and an egocentric perspective.

Enormous changes take place, both cognitively and socially, as children move through the second stage, the analytical stage (i.e., ages 7-11). This period contains some of the most important developments in consumer knowledge and skills. Characteristics of knowledge structures include abstract orientation, focus on functional/underlying features, complexity with two or more dimensions, and contingent (i.e., if-then), and dual perspectives (i.e., own plus others). Characteristics of decision-making strategies include a thoughtful orientation, a focus on functional/underlying features and relevant features, and complexity

of two or more attributes, expanded repertoire of strategies, moderate adaptivity, and dual perspectives.

The reflective stage (i.e., ages 11-16) is characterized by further development in several dimensions of cognitive and social development. Knowledge about marketplace concepts, such as branding and pricing, becomes even more pronounced and complex as adolescents develop sophisticated information processing and social skills. Many of these changes are more a matter of degree than kind. More distinct is the shift in orientation to a reflective way of thinking and reasoning as children move through adolescence and become focused on the social meanings and underpinnings of the consumer marketplace. A heightened awareness of persons' perspectives, along with a need to shape their own identity and conform to group expectations, results in increased attention to the social aspects of being a consumer, making choices, and consuming branded products. Consumer decisions are made in an adaptive manner, depending on the situation and task. In a similar fashion, attempts to influence parents and friends reflect social awareness as adolescents become strategic, favoring strategies that they think will be better received than a simple direct approach. Characteristics of the knowledge structure include an abstract orientation, focus on functional and underlying features, a multidimensional and contingent (i.e., if-then) focus, and dual perspectives in social context. Characteristics of decision-making strategies include strategic orientation, focus on functional, underlying, and relevant features, a complete repertoire of strategies, and fully developed and dual perspectives in social contexts.

Several studies have shown that family communication serves an important role in the consumer socialization process. Family communication has been defined in these studies as interactions between family members and adolescents about goods and services. Lachance, Legault, and Bujold (2000) found that family communication contributed to adolescent participation in family consumer tasks and decisions. Depending on the parenting style and the relationship an adolescent has with her or his parent, the adolescent's participation in family consumer tasks and decisions would vary. Two types of parenting styles were included in the study (i.e., social and conceptual styles). Parents using the social style of parenting want their adolescents to learn and respect family and common norms related to consumer activities. Adolescent participation depends on the expression of parental control and adolescent obedience to parental demands. Parents using the conceptual style of

parenting tend to let their adolescents develop consumer abilities through their own experiences. Parents ask their adolescent children to share the responsibility of family consumer activities to increase the children's educational experience, which enhances the adolescents' consumer socialization. Bush et al. (1999) found that parental communication about consumption-related activities is related positively to attitude toward advertising. Mangleburg et al. (1997) found that family communication increases adolescents' usage of product label information. These results highlight the significant role that parents play in helping adolescents learn about product label use. Family communication is important in adolescents' consumer socialization and acquisition of consumer skills and knowledge.

Social Comparison Theory

Festinger (1954) developed a theory of social comparison as a motivating force in human behavior. The theory was developed to help explain small-group behavior in terms of ability and opinion evaluation (Rudd & Lennon, 2001). Festinger posited that humans have a drive to evaluate themselves by comparison to some standard; however, if no objective standard exists, comparisons would be made to others (i.e., social comparisons). Festinger hypothesized that persons will compare themselves to similar others and want to be better than the comparison target in the ability dimension on which comparisons are being made. Social comparison theory explains the process of thinking about information concerning one or more other persons in relation to the self (Wood, 1996). The phrase "thinking about" sometimes implies extensive thought that focuses intensively on a comparison target and scrutinizes similarities and differences; other times, it does not imply careful or even conscious thought. It only involves identifying others who are similar to the self or who are upward (i.e., superior to the self) or downward (i.e., inferior to the self) on some dimension. Any social information can be the target of social comparison. A comparison does not require direct, personal contact with a specific other person. It may be made through reading about others in the newspaper or hearing about another person through gossip. The social information may be summary in nature rather than about specific instances. Even fictional characters and stereotypes may represent meaningful standards of comparison.

According to the social comparison theory, the individual has a need to compare himself on various attributes with other individuals in order to judge the consequences of his

behavior when physical evidence is not available (Festinger, 1954). Persons often expect to perform as well as other persons who are similar to them and feel pleased when they do perform as well or feel displeased when we do not (Goethals, 1986). Social comparison increases one's ability to evaluate his self-concept and offers an occasion for altering the self-concept (Lee, 1998). Persons engage in a relatively continuous self-evaluative process to determine whether they are "normal." They reflect on their characteristics, strengths, and capabilities to develop a consistent and orderly impression of self and then use this self-examination process to facilitate self-understanding and consistent, effective behaviors (Thompson, Coovert, & Stormet, 1999).

Escalas and Bettman (2003) studied reference groups as a source of brand associations, which can be linked to one's mental representation of self to meet self-verification or self-enhancement goals. The authors conceptualized this linkage at an aggregate level in terms of self-brand connections, that is, the extent to which individuals have incorporated brands into their self-concepts. Results of their research indicated that brands used by member groups and aspiration groups can become connected to consumers' mental representation of self as they use these brands to define and create their self-concepts. The degree to which member group and aspiration group usage influenced an individual's self-brand connections was contingent on the degree to which the individual belonged to a member group or wished to belong to an aspiration group. For individuals with self-enhancement goals, aspiration-group brand use had a greater impact on self-brand connections; for individuals with self-verification goals, on the other hand, member-group brand use had a greater impact.

Researchers have applied social comparison theory to the evaluation of appearance (Botta, 1999; Kim & Lennon, 2007; Richins, 1991; Tiggemann & McGill, 2004). An individual may evaluate himself or herself by comparing to absolute standards (e.g., supermodels on magazine covers) or by comparing to others (e.g., peers). According to Botta (1999), persons often automatically compare themselves to others without conscious thought. For example, automatic comparison through mass media that portray cultural ideals of beauty or materialism may occur without intent. Because women's images in mass media are often extremely thin or slim, automatic social comparisons with these images may make women vulnerable to negative feelings. Exposure to idealized images may alter compassion

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standards of the self, resulting in reduced satisfaction with the self. Richins (1991) found that the more women perceived a deficit in their own appearance compared idealized advertising images of female models, the more dissatisfied they were with their bodies. Tiggemann and McGill (2004) also showed that women exposed to images of thin idealized female beauty experienced negative moods and body dissatisfaction, and these effects were mediated by the amount of social comparison. Many studies have shown that social comparison theory can be used to explain relationships between exposure to thin women portrayed in mass media (e.g., fashion or beauty magazines) and overall appearance dissatisfaction as well as eating disorder tendencies (Botta, 1999; Kim & Lennon, 2007; Stice & Shaw, 1994; Thompson & Heinberg, 1993). These studies showed that exposure to thin women portrayed in magazines produced a negative affective state including guilt, shame, stress, unhappiness, insecurity, and body dissatisfaction. This negative affect together with subscription to a thin ideal predicted eating disorder behaviors.

Social Identity Theory

In social identity theory, proposed by Tajfel and Turner (1979), the concept of social identity is considered central in understanding intergroup relations and is regarded the key element linking the individual to his or her social group (Tajfel, 1981). Social identity can be defined as that part of the individual's self-concept that derives from his or her knowledge of membership to a social group or groups together with the value and emotional significance attached to the membership (Tajfel & Turner, 1986). Because an individual can belong to a wide variety of groups, one's overall self-concept is composed of multiple social identities. Similarly, Damhorst, Miller-Spillman, and Michelman (2005) propose that individuals tend to have multiple roles that define parts of the self. Roles are positions that persons occupy in a group or society. These positions are defined by social relationships; persons take on roles in relation to other persons. Performance of a role is guided by social expectations for the role-player's behavior. The individual performs roles are parts of the puzzle that make up the individual's identity. Other aspects of identity include unique personal traits and interests that are not necessarily role related. An individual has many identities that make up his or her total self.

Social identity theory proposes that social identity results from categorization in the social group. Categorization is a fundamental cognitive process that allows persons to organize information about the world. Categorization of stimuli, social or not, involves the psychological accentuation of differences between categories and the attenuation of differences between elements within categories, the metacontrast principle (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Once categorized in a social group, group members are then motivated to maintain or acquire a distinct and positive social identity for their in-group. Social identity theory assumes that persons are motivated to see themselves positively, but extends this motivation to include one's group memberships or social identities (Schmitt, Silvia, & Branscombe, 2000). The motivation to have a positive social identity results in the tendency to favor the in-group while discriminating against out-groups; however, this group-protective motivation also results in the differential evaluation of in-group members according to their contribution to the group's positive distinctiveness (Turner et al., 1987). Those in-group members who contribute positively to the group's identity are liked more than those whose attributes or behavior harm the group's image. In-group members with negative qualities that harm the in-group identity are liked even less than out-group members with similarly negative qualities (Marques & Paez, 1994).

The desire for a positive social identity is moderated by the degree to which the group identity is integrated in the self-concept (Schmitt et al., 2000). Those who are low in identification with the group strive to protect their individual identities, whereas highly identified group members are more likely to protect the identity of the group as a whole. Tarrant (2002) found that the higher the level of identification with in-groups, the more favorable were research participants' reported evaluations of their own group and in contrast the more the participants' tendency to associate negative characteristics, such as boring, ignorant, and unfriendly with out-groups. Consistent results were found in a study by Escalas and Bettman (2005). In this study, consumers reported higher self-brand connections for brands with images that were consistent with the image of the in-group than for brands with images that were inconsistent with the image of the in-group. Consumers used products with brands whose images matched reference groups to which they belonged to establish a psychological association with those groups. On the other hand, consumers rejected the social meanings of brands attached to products used by out-groups. The authors proposed

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that these different effects were due to stronger self-differentiation goals for consumers with more independent self-concepts than for consumers with less independent self-concepts. The study also showed stronger effects for more symbolic brands than for less symbolic brands. White and Dahl (2007) studied the effect of out-groups and found that products associated with dissociative reference groups have a greater impact on product evaluations and choices than do products associated with out-groups.

Conformity Theory

Conformity is the desire of an individual to fit in a certain group (Blackwell et al., 2001). Sherif (1948) explains that through communication with each other, the individuals within an interacting group tend over time to develop and use the same frame of reference in making judgments. As a result, the individuals' behavior becomes increasingly uniform. It follows that visual analyses of appearances and corresponding judgments also take place within a frame of reference and gradually evolves conformity to a common manner of dress. Due to the desire to protect self-concept in social situations, persons may change their actions to achieve consistency with real or imagined expectations and behaviors of groups or other individuals (Kiesler & Kiesler, 1970). For example, persons may make a conscious effort to dress similarly to their co-workers in order to conform to the work situation, or when not knowing how to behave in a certain situation, they may take cues from other persons as to how to conform to the situation. Individuals vary in the degree of willingness to conform to others' expectations.

Peer conformity is an assessment of whether or not individuals adopt a certain course of action sanctioned by their peer group (Santor, Messervey, & Kusumakar, 2000). Belonging to a group requires conformity to group interests and desires. Becoming a member of a peer group is one of the primary developmental tasks of adolescence (Coleman & Hendry, 1990). Santor et al. (2000) found that peer conformity is a strong predictor of risky behavior, such as substance use, delinquency, and poor school performance.

Several studies have addressed the effect of conformity on clothing behavior. Creeekmore (1980) found significant relationships between conformity to the model dress and various types of peer acceptance. These findings imply that conformity in matters of dress may be an important condition for peer acceptance for adolescents. Kim, Rhee, and

Yee (2008) found that the clothing leader was not necessarily the most popular person among adolescents. Adolescents showed great conformity to peers, which led to clothing conformity. On the contrary, Chen-Yu and Seock (2002) found that conformity was the weakest clothing purchase motive of the motives they examined for both male and female high school adolescents.

Adolescents and Reference Groups

Reference groups play an important role in adolescents' behavior. Young persons try to associate with reference groups (Vieria, 2009), and peers, parents, media, and school are important agents for adolescents in the process of socialization (Moschis, 1987). Among these agents, many studies have shown that peer influence is most significant. Meeus and Dekovic (1995) found that peers have the most influence on identity development; they are more influential than parents for both relational identity (i.e., the identity developed through social support, such as from a personal friend) and school or work identity (i.e., the identity developed through interactions with peers such as classmates or colleagues in a formal manner).

Several researchers have examined peer influence on consumer behavior. Makgosa and Mohube (2007) investigated the effects of peer influence on African American college freshman students' product purchase decisions. Overall findings demonstrated that peer influence is greater for products that are consumed in public, such as sunglasses and shoes, than for products that are consumed in private and are necessities such as toothpaste. Nelson and McLeod (2005) examined individual differences in brand consciousness and found that perceived brand consciousness of friends is positively related to U.S. adolescents' brand consciousness. Chen-Yu and Seock (2002) studied adolescents' clothing behavior and found that peers have a strong influence. Friends are the most important clothing information source for both females and males, although the influence of friends is stronger for females than for males. The authors asserted that when adolescents observe friends or fashion leaders wearing a product, they may also want to purchase similar items. Grant and Stephen (2005) also found that peer groups are fundamental to adolescents' decision-making process for purchasing fashion clothing. When adolescents buy their own casual or fashion wear, they

make a conscious decision regarding clothes they wear, depending on which friends are present and where they are going.

Parents are the primary socialization agents for inculcating rational, socially desirable, and effective consumption behavior for adolescents (Ward, Robertson, Klees, & Gaitgnon, 1986). In discussions, parents encourage young generations to develop skills in selecting and interpreting product information. Palan (2001) indicates that parents influence the development of children by purposefully training, being role models, and providing opportunities to learn. The author further suggests that a parent's general socialization orientation or parental style serves as a context that impacts how parents and children interact in purchase decisions. The roles of parents in attempts to teach adolescents to be effective consumers include experiences with the use of money and ways to shop for quality products, how to compare products effectively and how to buy products on sale, personal brand preferences, and developing abilities to distinguish facts in exaggerated advertisements (Assael, 1992). Moschis (1987) points out that parental influence on consumer behavior is situation-specific, varying across products and stages in decision-making processes. Meeus and Dekovic (1995) found that parents influence the process of identity formation. Parents have a positive influence on adolescents' development of school identity and work identity. Beyers and Goossens (2008) studied short-term changes in parenting and identity formation during late adolescence, finding that parenting and identity formation are dynamically interlinked. These results underscore that parents remain an important source of socialization as their children and adolescents develop.

Media also play an important role in the function of reference groups. Nelson and McLeod (2005) examined marketing communication tactics in the context of media socialization and found that exposure to movies is positively related to brand consciousness for U.S. adolescents. Brand-conscious adolescents perceive great effects of product display on their own purchasing behaviors as well as their friends' and other adolescents' purchasing behaviors. Conducted in a cross-cultural context, this study showed that U.S. adolescents are more likely than Austrian or French adolescents to purchase branded products they see in movies. Grant and Stephen (2005) examined key communicating factors that influence adolescent girls' in their purchase decisions for fashion clothing and found that advertising media was influential. The most influential advertising media are magazines that are

purchased or free (e.g., in-store house magazines, fashion advertisements), followed by billboard, cinema, satellite, and "free-view" shopping channels.

Limited studies have addressed the influence of popular boys or girls on adolescents' behavior. A recent study by Owens and Duncan (2009) was an analysis of focus group discussions among adolescent girls on the topic of popularity. A conclusion from this work is that adolescent girls see popularity as concerning public visibility, prominence, social power, and influence rather than likeability. The adolescents in the focus groups were unanimous in their view that popular girls stand out from their peers through being pretty and fashionable. They also viewed popular girls as having great opportunity to be fashionable from the wealth of their parents, or at least from being able to persuade their parents to provide money for fashionable clothes. Popular girls as a group were seen as uniform in what they wear and the ways in which they present themselves. This uniformity of dress and appearance seems to enable popular girls to be viewed as a distinct group. The adolescent girls in the study indicated that popular girls have power over other students. Popular girls use this power in a variety of ways, including threats, verbal harassment, spreading rumors, and manipulating friendships. Generally, students expressed intimidation by and fear to face up to popular girls.

Measures of Reference Group Influence

Currie, Wesley, and Sutherland (2008) examined peer groups' influences on travel destination choice. A questionnaire with mostly open-ended questions was developed and distributed to university students. Students were asked to document information pertaining to their past and present travel choices as well as their perceptions of the influence of peers, family, and organizations on these choices. Questions addressed the individual's relationship to peers and how these relationships influence their decision making.

Park and Lessig (1977) developed 14 items to measure reference group influence. These items were designed to reflect informational, value-expressive, and utilitarian reference group influences. An example of the statements to measure the influence of informational reference groups on product decisions is "An individual would seek information about pool tables from fellow workers who are familiar with them." An example of the statements to measure the influence of value-expressive reference groups is "An

individual would probably feel that purchasing a pool table would enhance his or her image among other persons." An example of the statements to measure the influence of utilitarian reference groups is "An individual's decision about whether or not to buy a pool table would be influenced by the expectations of family members." Participants responded to each statement on a six-point scale ranging from disagree (1) to agree (6).

Makgosa and Mohube (2007) measured normative influence using two statements: "If others can see me using a product, I usually purchase the product they expect me to buy." and "I rarely purchase the latest fashions until I am sure my friends approve of them." The authors measured informational influence with another two statements: "I often consult other persons to help me choose the best alternative available from a product class." and "If I have little experience with a product, I often ask my friends about the product." Respondents were asked to indicate the degree of their agreement with the statements on a five point Likert scale ranging from 1 = "strongly agree" to 5 = "strongly disagree."

Involvement

Recently, researchers have recognized that the concept of involvement plays an important role in explaining consumer behavior, including shopping values, attitude formation, consumer satisfaction, and brand loyalty (Belleau et al., 2007, Chang, Burns, & Francis, 2004; Chen-Yu, 1995; Francis, 1992; Shim & Kotsiopulos, 1991; Yurchisin & Johnson, 2004). Shim and Kotsiopoulos (1991), for example, found clothing involvement is key in identifying primary consumer groups for segmenting the market of big and tall men. Results indicated that a big and tall consumer who expressed the belief that clothing is an important tool for his impression management (i.e., a high level of clothing involvement) showed high interest in fashion and active engagement in culture and social lifestyle. The highly involved consumers showed high shopping interests and strong store patronage, but were less price conscious than those with lower levels of clothing involvement. As a result, the high clothing-involved consumers were heavy buyers in terms of dollars per year. Other theoretical and empirical work has indicated that involvement is likely to influence emotional responses. Involvement with shopping heightens a consumer's excitement with the shopping experience (Jones, 1999; Mano & Oliver, 1993).

The following sections introduce definitions of involvement, types of involvement, involvement levels (i.e., involvement levels and product category, involvement levels and consumer characteristics), adolescents and involvement, and measures of involvement.

Definitions of Involvement

McNamara (2008) defines involvement as how much time, thought, energy, and other resources persons devote to the purchase process. Zaichkowsky (1985) defines involvement as the perceived relevance of an object based on a person's inherent needs, values, and interests. In addition to interest and importance, involvement includes emotional and ego aspects. The involvement construct is motivating in nature. When we are involved, we pay attention, perceive importance, and behave in a different manner than when we are not involved.

Involvement definitions often vary according to the domain and focus of the research; however, personal relevance is an underlying theme found in the literature (Zaichkowsky, 1986). With respect to advertising, Oh and Jasper (2006) define involvement as an individual's level of motivation to process an advertising message for product evaluation. Different consumers respond differently to the same message. The more involvement consumers have with a message, the more they give counter arguments and use different message cues to form evaluations. In a study of consumer behavior, Mano and Oliver (1993) define involvement as the inherent need fulfillment, value expression, or interest the consumer has in a product. Rothschild (1984) defines involvement as an unobservable state of motivation, arousal, or interest. Involvement is evoked by a particular stimulus or situation and has drive properties. The consequences of involvement are types of searching, information processing, and decision making. In research focused on a product, the concern is with the relevance of the product to the needs and values of the consumer, and hence interest in product information. In purchase-decision research, the concern is with the relevance of the decision, and hence the degree to which the consumer will be motivated to make a careful purchase decision.

Types of Involvement

Popular terms to categorize involvement include ego, product, brand, enduring, response, situation, low, high, purchase, rational, emotional, and message processing (McNamara, 2008; Oh & Jasper, 2006). The following sections concern product involvement and purchase involvement. Specifically, each section addresses definitions, measures, and research in relation to each type of involvement.

Product Involvement

Some researchers have used the term involvement to refer to the relationship between a person and a product (i.e., product involvement) (Kim, 2005; Quester & Smart, 1998). Product involvement definitions often include an individual's pre-dispositional factor (Oh & Jasper, 2006). Bloch (1986) defines product involvement as an unobservable state reflecting the amount of interest, arousal, or emotional attachment a consumer has with a product. Product involvement is conceptually similar to enduring involvement, which was defined by Houston and Rothschild (1978) as an ongoing concern for a product class. Richins and Bloch (1986) suggest that enduring involvement is independent of purchase situations and is motivated by the degree to which the product relates to the self and/or the hedonic pleasure received from the product.

One type of product involvement is ego involvement. The ego can be defined as a constellation of attitudes that form toward objects, persons, situations, and groups. Ego involvement may be defined as the importance of the product to the individual and to the individual's self-concept, values, and ego (Beatty, Homer, & Kahle, 1988). When any stimulus is related to the domain of the ego, ego involvement is said to exist. As with product involvement, ego involvement is a type of enduring involvement, and ongoing concern for a particular product class is relatively independent of purchase situations (Chang, Burns, & Francis, 2004).

Some researchers have examined consumers' involvement with apparel products specifically. Kim, Damhorst, and Lee (2002) examined how consumer involvement with apparel influences perceptions of an apparel product (i.e., T-shirt) presented in a print advertisement. Three dimensions of apparel involvement were tested (i.e., fashion, comfort, and individuality). Findings confirmed that apparel involvement shapes consumer attitudes.

A combination of apparel involvement dimensions (i.e., fashion, individuality, and comfort) influences consumer beliefs about product attributes presented in the advertisement. In terms of gender differences, the comfort variable was a stronger component of apparel involvement for men, and women tended to be more involved in fashion.

Kim (2005) explored consumer segmentation based on levels of apparel product involvement and examined whether consumers could be differentiated by their personally-held values using Kapferer and Laurent's (1985/1986) consumer involvement profiles. Four dimensions of involvement were revealed (i.e., perceived product importance/risk, probability of a mispurchase, perceived symbolic sign, and pleasure/interest), and five consumer involvement types were identified (i.e., challenged moderate, knowledge enthusiast, indifferent moderate, challenged enthusiast, and cautious moderate). The study showed that values could be used to explain differences between the enthusiast and moderate consumer types. All nine value items in the study had significant relationships with dimensions of perceived sign and pleasure/interest. Knowledge enthusiast and challenged enthusiast types of consumers perceived many values to be significantly more important than did challenged moderate types.

O'Cass (2004) examined relationships among fashion clothing involvement, purchase decision involvement, subjective fashion knowledge, and consumer confidence. Results indicated that fashion clothing involvement influences fashion clothing knowledge and that fashion clothing knowledge influences consumer confidence in making purchase decisions about fashion. Yurchisin and Johnson (2004) examined compulsive buying behavior of adults ages 18 to 24 and found a positive relationship between clothing product involvement and compulsive buying behavior. Results showed that consumers who rate the sign value and the interest value of clothing products as high tend to exhibit a high level of clothing-product involvement, and those consumers with clothing-product involvement are likely to purchase clothing products compulsively because these consumers believe that clothing can communicate messages about their identities and help attain desired self-definitions.

The structural model developed by Chang et al. (2004) for female respondents showed that even though involvement and variety seeking have no direct influence on shopping experience satisfaction, when product involvement is mediated by hedonic shopping value, it influences shopping experience satisfaction indirectly. In other words,

product involvement and variety seeking were found to significantly relate to consumers' hedonic value, and, in turn, they indirectly influence shopping experience satisfaction through hedonic shopping value. For females, involvement and variety seeking were not direct or indirect predictors of shopping experience satisfaction. Therefore, the researchers confirmed gender as an important variable in clothing experience shopping.

Purchase Involvement

Ganesh, Arnold, and Reynolds (2000) define purchasing involvement as involvement that relates to the level of concern for or interest in the purchase process triggered by the need to consider a particular purchase. Purchase involvement can be understood as the cost, effort, or investment in a purchase (Mittal & Lee, 1989; Zaichkowsky, 1985). It is the outcome of an individual's interaction with the product and purchase situation. Punj and Stewart (1983) suggest that involvement may be viewed as an interaction of the task and the individual. This interaction need not be a statistically significant interaction but could involve a dynamic model that stresses an interwoven structure. Purchase involvement could be increased by increasing ego involvement or by the occurrence of other outside events (e.g., the development of a new and improved product choice). The issue revolves primarily around the importance of the decision and the perceived riskiness of that decision.

Belk (1982) tested varying types and levels of involvement (i.e., in relation to purchase decisions) through different gift-giving scenarios. The author hypothesized that in different gift-giving situations, consumers would have different levels of purchase involvement and would purchase gifts with different desirable characteristics. Belk predicted that low-involvement gift-giving situations would be reported as gifts that are not costly, easily purchased gifts, and low-quality gifts. In order to test these propositions, a completely randomized experimental design was employed with subjects assigned to four treatment conditions (i.e., four gift-giving situations) to create two levels of purchase involvement. Two situations created low purchase involvement and two created high purchase involvement. The two situations creating a low level of purchase involvement were "a thank you gift to repay some favor, such as watching your home while you are away for a close female friend who is about your age" and "a birthday gift for a casual female friend who is older than you." The two situations creating a high level of purchase involvement were "a

wedding gift for a close young female relative" and "a birthday gift for a close female friend who is about your age". The manipulations of involvement in the study were checked and the results showed that the four situations did successfully create high and low levels of purchase involvement. For example, the "wedding" and "birthday gift for a close friend" situations were perceived as more involving than the "thank-you gift." Results of the study showed that differences in involvement cause different consumer purchase strategies to be evoked. Participants with a low level of purchase involvement decide to purchase gifts, that are not costly, easily purchased gifts, and low-quality gifts.

Shao, Baker, and Wagner (2004) conducted an experiment to test the effects of the appropriateness of service personnel dress on customer expectations for a firm's service quality and intent to purchase banking services. The authors also explored the moderating effects of involvement and customer gender on the aforementioned relationships. In this study, involvement was varied as high or low by having subjects read scenarios and imagine that they were making a particular investment decision. The high involvement scenario asked each respondent to imagine that a substantial amount of money was to be invested, that the investment under consideration was in small capitalization stocks that presented a high level of risk due to widely fluctuating returns, and that he or she "strongly believes that making the right investments now will greatly improve the quality of life in the future." The low involvement scenario asked respondents to imagine themselves as thinking about going along with other persons regarding investing, that they had "a relatively small amount of money" to invest, and that they were considering U.S. government bonds as an investment, described as having relatively stable returns and low levels of risk The involvement manipulation was checked and confirmed that the two scenarios did successfully create two levels of involvement. Results showed that respondents in the low involvement condition placed more emphasis on appropriateness of dress than did respondents in the high involvement condition. The appropriateness of the investment banker's dress had a greater impact on customer purchase intentions when the decision regarded a low involvement investment than when it regarded a high involvement investment. Dress played a more important role in information processing when subjects had low personal involvement in their investment decision making. The researchers suggested that managers of firms that offer services that may induce relatively low involvement for the majority of their customers (e.g., car wash, appliance

repair, or clothes cleaners), or for certain types of transactions (e.g., bank teller transactions) may want to pay particular attention to the appropriateness of their employees' dress.

Involvement Levels

In the field of consumer behavior, an important distinction has been made between low and high levels of involvement (Day, Stafford, & Camacho 1995). Oh and Jasper (2006) used the elaboration likelihood model (ELM), which was first proposed by Petty and Cacioppo (1980; 1986), to conduct an experimental study to examine information processing activities and attitude formation. According to ELM, involvement level is key to understanding and explaining how advertisements influence attitudes toward a product or brand. In ELM, involvement level refers to the amount of attention one pays to an advertisement when evaluating a product or brand. ELM postulates two distinct processing modes of attitude formation or change according to involvement level, with central processing at a high-involvement level and peripheral processing at a low-involvement level. The more involved persons are in product judgment, the more likely they are to scrutinize product-relevant information. Elaboration on product-relevant messages enables persons to discern the strength of the message argument, which in turn influences their attitude toward the product. The message argument is defined as the pertinence of the message to the evaluation of the product's merits (Petty & Cacioppo, 1986).

At a low level of involvement, persons do not make an effort to process the message (Oh & Jasper, 2006); however, they still form attitudes toward the product through peripheral processing. Without carefully examining product-relevant information, they base their product attitudes on peripheral cues, such as attractive endorsers, music, and the background of the advertisement (Miniard, Bhatla, Lord, Dickson, & Unnava, 1991). For persons with low levels of involvement, it is not the strength of the message argument, but rather individuals' reactions to peripheral cues that influence their attitudes toward the advertised product. Participants with a high level of involvement devote more information processing effort to specific elements of the advertisement (i.e., verbal messages for the utilitarian product and pictorial information for the expressive product) than do participants with a low level of involvement. As a result, when the level of involvement is high, the message

argument influences the consumer's attitude toward the utilitarian product, whereas the background picture influences attitudes toward the expressive product.

Zaichkowsky (1986) stated that three characteristics influence an individual's involvement level. The first factor relates to the characteristics of the person. A person's inherent value system, goals, needs, and personality traits, along with his or her unique experiences, determine whether the person is involved with a particular object. The second factor relates to the physical differences of the stimulus. The physical differences might pertain to differences in type of media (e.g. television, radio, print), or in the content of the communication, or even the variation found in the product classes being advertised. The third factor impacting the involvement is situation. For example, the individuals' involvement with trendy clothing items is usually high initially, but quickly diminishes once fashions begin to change.

Bloch and Richins (1983) and Peter and Olson (1987) indicated three categories of factors that affect an individual's involvement level. Two factors, personal factors (i.e., inherent interests, values, and needs that motivate one toward an object) and situational factors (i.e., factors that temporarily increase the relevance of an object or interest towards it), are similar to the factors proposed by Zaichkowsky (1986); however, instead of how factors relate to differences in the stimulus, these authors proposed that product characteristics (i.e., characteristics of products that increase interest and differentiate them from other products/brands), such as price or symbolic meaning, influence an individual's involvement level.

Involvement Levels and Product Category

Bloch (1986) suggests that each consumer's level of product involvement lies along a continuum and varies according to product category. Certain product categories generally tend to elicit higher levels of involvement than do other product categories in a majority of consumers. McNamara (2008) used two dimensions, involvement and rational/emotional, to categorize products and services into four groups (i.e., high involvement/rational, high involvement/emotional, low involvement/rational, and low involvement/emotional). For the consumer, the high involvement/rational purchases tend to be linked to high cost. This category can include financial services and products, the purchase of a home or car, as well

as major appliances and electronics. High-involvement consumer purchases can vary significantly on the rational/emotional scale from individual to individual. For example, a car may be considered solely as a means of transportation to work or considered as a representation of one's status and ego. If the product represents one's status and ego, the individual will be emotionally involved with the product. The high-involvement/emotional group may include office design, advertising, and the hiring of particular employees. For an individual, high-involvement/emotional purchases can include jewelry, weddings, and holiday travel plans. Advertising in this category tends to focus on visual and emotional appeals, giving persons visual details with music.

The low-involvement/rational group includes items one buys out of habit, without much thought. This sub-dimension includes many items from the drug store or supermarket, for example, office supplies. The advertiser tends to focus on encouraging consumers to try the product or switch brands. This strategy is intended to break one's automatic habit of spending money with a competitor. Tools are often employed, such as coupons, incentives, product differentiation, and product re-positioning. Lastly, when the gratification one receives from a product or service is emotional, but fleeting, this product/service is categorized in the low- involvement/emotional group. Consumers do not spend a great deal of time thinking about the purchase of the product/service in this group, such as movies, candy, or magazines. Advertising strategies include promising pleasure, gratification, and other benefits. Strong product or brand positioning must be identified in this crowded product category.

One category that elicits a high level of product involvement is clothing (Engel et al., 1986; Francis, 1992; Oh & Jasper, 2006). Engel et al. (1986) suggested four reasons that clothing is a high-involvement product: (a) clothing is perceived as enhancing one's self-image, (b) many clothing items are costly, (c) the risks of a wrong decision are high, and (d) the purchase usually has high personal relevance to the decision maker. Kapferer and Laurent (1985/1986) examined, with a sample of housewives, the relationships between four dimensions of involvement (i.e., perceived importance/interest, decision risk, sign value, and pleasure) with 14 different product categories. Dresses show the highest score in all four types of involvement, indicating that dresses are considered the highest involvement product. The authors attributed participants' high level of involvement with dresses to three

dimensions of this product class. The first dimension is sign value of a product (i.e., the consumer's perception of the product's ability to express one's status, personality, or identity). The second dimension is pleasure (i.e., the hedonic and rewarding value of the product class). The third dimension is perceived importance/interest (i.e., the level of importance placed on the product category or the level of interest in the product category). Kapferer and Laurent found that individuals who are highly involved with a particular product category express the belief that products of that category possess the ability to communicate messages about their identities, thus playing a central role in their lives.

Involvement Level and Consumer Characteristics

In product judgment, highly involved consumers are likely to scrutinize product-relevant information. They engage in information search, see differentiation among brands, have complex choice processes, and are committed to certain brands (Kapferer & Laurent, 1985/1986; Zaichkowsky, 1985). These consumers are less susceptible to persuasion than those who are less involved (Johnson & Eagly, 1989). Research has also shown that consumers with high involvement exert considerable cognitive effort in comprehending and evaluating information about relevant attributes of alternative products (Chaiken, 1980). They are also strongly influenced by reference groups and motivated to comply with reference group pressures (Houston & Rothschild, 1978).

At a low level of involvement, persons do not generally make an effort to process the message (Oh & Jasper, 2006); however, they still form attitudes toward the product through peripheral processing. Without carefully examining product-relevant information, consumers base their product attitudes on peripheral cues such as attractive endorsers, music, and the background of the advertisement. A peripheral cue is any advertising element that is not central to the product's merits, but can affect attitudes toward it. Zaichkowsky (1985) proposed that one who engages in a relative lack of active information seeking about brands and little comparison among product attributes perceives similarity among brands and has no special preference for a particular brand. Consumers with low involvement usually perceive different brands of a product as similar, and thus have no special preferences for particular brands (Zaichkowsky, 1985). They do not actively seek information about brands or conduct comparisons among product attributes.

Jin and Koh (1999) proposed that the genders would differ significantly in the formation of clothing brand involvement. Generally, women have greater knowledge of clothing and are more involved with their clothing. Compared to men women browse and search more before making clothing purchases and are more satisfied with their purchases. Many research results are consistent with these propositions. O'Cass (2004) examined the effects of materialism and self-image and product-image congruency on consumers' involvement in fashion clothing and purchase decision involvement. The author's research indicated that females are more involved in fashion clothing than males. Research by Auty and Elliott (1998), Browne and Kaldenberg (1997), and Goldsmith, Flynn, and Moore (1996) also showed that women are more involved in fashion than men.

Vieria (2009) tested an extended theoretical model of fashion clothing involvement. Results indicated a significant and positive relation between materialism and fashion involvement. Age (i.e., younger versus older) had a significant negative influence on fashion clothing involvement. Younger persons placed more importance on their clothing than older persons. Fashion clothing involvement was associated with subjective fashion knowledge (i.e., how much consumers thought or perceived they knew about the fashion product). Compared to consumers with a low degree of clothing involvement, consumers with a high degree of clothing involvement perceived themselves as having a better knowledge in fashion products. The study also showed that the higher the involvement with fashion clothing, the higher the continuous commitment the consumer would have in keeping her or his wardrobe up to date with trends. Fashion involvement and time spent shopping were significantly and positively related. Compared to consumers with a low degree of fashion involvement, consumers with a high degree of fashion involvement would spend more time trying on and deciding the product in stores.

Adolescents and Involvement

Several studies have addressed adolescents' product involvement and trend involvement. Aaker (2005) examined the influence of adolescent-peer interaction and product involvement on an adolescent's contribution to a family purchase decision. Results demonstrated that product involvement mediates the relationship between adolescent-peer interaction and the adolescent's contribution. The more the adolescent interacts with peers,

the more the adolescent is involved with the product, and then the more the adolescent contributes to the initiation, information search, and product assessment. Aaker (2005) suggested that the relevance of a product to an adolescent may be strengthened or validated by communication and interaction with peers about that product, and thus, adolescent-peer interaction is positively related to an adolescent's involvement with the product class.

Sullivan and Heitmeyer (2008) studied young consumers', including adolescents', apparel shopping involvement and the relationship with their retail preference and patronage intentions. The authors found that those with a high level of apparel shopping involvement have a low level of retail preference. High-involved apparel shoppers do not have a high degree of preference for particular retail stores but shop in various stores. Those with low apparel shopping involvement have a low degree of patronage intentions. On the basis of the results, the authors suggested that shopping involvement could be used to predict future store patronage.

Haytko and Baker (2004) examined female adolescents' mall experience and trend involvement (i.e., an ongoing desire to be familiar with the most up-to-date merchandise). The authors found that all of the middle school female adolescents, most of the high school female adolescents, and a few of the college female adolescents have a high level of trend involvement. They are frequently at the mall, visit many stores, and enjoy shopping. They have a desire to look at a large number of products and brands and to scope out something new during every mall trip. Thus, adolescent females "see" everything and also "look" for specific things on each visit. They receive pleasure directly from the time they spend exploring the shopping environment. Those in the study who reported that their trips to the mall were only out of necessity and utility had a low level of trend involvement. These female adolescents do not enjoy shopping. They go to the mall, make a purchase, and leave.

Measures of Involvement

Most measures of involvement used in research are directly adopted from a measure developed by early researchers or modified to be suitable for a specific study (Chang et al., 2004; Kim, 2005; O'Cass, 2004; Yurchisin & Johnson, 2004) The measures of product involvement and purchase involvement are reviewed in the following sections.

<u>Measures of Product Involvement</u>

Involvement with products has been measured by several methods. In early years, the methods included rank-ordering products (Sheth & Venkatesan, 1968), rating a series of products on an eight-point concentric scale as to their importance in the subject's life (Hupfer & Gardner, 1971), asking how important it is to obtain a particular brand (Cohen & Goldberg, 1970), or counting the total times that subjects report "don't know" for a series of brands (Ray, 1973). On a broader level, involvement has been measured by administering Likert statements that were thought to tap the underlying concept (e.g., the product meant a lot to me, it matters to me, or the product is important to me) (Lastovicka & Gardner, 1978; Traylor, 1981).

In 1985, Zaichkowsky developed a 20-item scale, the Personal Involvement Inventory (PII), in which involvement is treated as a one-dimensional construct measured by a single score. The definition of involvement, for the purposes of scale development, was "a person's perceived relevance of the object based on inherent needs, values, and interests" (p. 342). A semantic differential scale with a list of 168 word pairs was developed based on this definition of involvement. Examples of those pairs are important-unimportant, interested-uninterested, and exciting-unexciting. A 30-item scale was first developed to measure over three domains: products, advertisements, and purchase decisions. Then the scale was reduced to 20 items to focus on measuring involvement with products. The scale was demonstrated to have content validity by expert judges in two phases of the scale development: first, for the selection of items; and second, through classification of open-ended responses from subjects. The reliability or stability of the scale over time was checked over two subject populations for an average test-retest correlation of 0.90. The criterion-related validity of the scale was checked by the degree of agreement with the order of various products. To test the construct validity (i.e., the conformance of the scale to theoretical propositions), the scale was administered to clerical and administrative staff members and covered three different product categories and several statements on behavior proposed to be representative of involvement. Over all three product categories, the scale scores were positively related to the subjects' responses to the statements on theoretical propositions pertaining to involvement.

Later, Zaichkowsky (1994) demonstrated that the PII may be reliably reduced from 20 items to 10 items. The revised 10-item PII may be broken into two subscales, representing

a cognitive grouping and an affective grouping. The items grouped as cognitive were important, relevant, valuable, means a lot to me, and needed. The items grouped as affective were interesting, exciting, appealing, fascinating, and involving.

Kapferer and Laurent (1985/1986) argued that consumer involvement cannot be expressed with a single score because involvement has many aspects in addition to levels of involvement. The authors included five facets of involvement in their measure, Consumer Involvement Profiles. They are: (a) interest (centrality, ego-importance of the product class), measured with items such as "I have a strong interest in ____" and "I attach a great importance to ____"; (b) pleasure (hedonic and rewarding value of the product class), measured with items such as "I give myself pleasure by purchasing a ____" and "When one buys a ____, it is a bit like making a gift to oneself"; (c) sign (perceived sign value of the product class), measured with items such as "The ____ you buy tells a little bit about you", and "You can really tell about a person by the ____ he/she picks out"; (d) risk importance (perceived importance of the negative consequences of a mispurchase), measured with items such as "When you get a ____, it's not a big deal if you make a mistake" and "It is really annoying to purchase a ____ that is not suitable"; and (e) risk probability (subjective probability of making a mispurchase), measured with items such as "When I purchase a ____, I am never sure of my choice" and "When I face a shelf of ____, I always feel a bit at a loss to make my choice."

McQuarrie and Munson (1987) modified and extended Zaichkowsky's Personal Involvement Inventory (1985) to produce a measure that also included Kapferer and Laurent's (1985/1986) five aspects of involvement. The authors conducted a study to verify their revised measure, and results showed high correlation between Zaichkowsky's (1985) original measure and their revised measure.

Measures of clothing involvement. Involvement with clothing has been measured by several methods. Chen-Yu (1995) developed a scale of sweatshirt involvement, based on involvement questions developed by McQuarrie and Munson (1987) and Zaichkowsky (1994). The sweatshirt involvement scale contained seven questions that were adapted from McQuarrie and Munson (1987). The seven questions are always stated as "Sweat shirts are ___," but the response scale varies, including "important to me" to "unimportant to me," "boring" to "interesting," "express who I am" to "say nothing about me," "don't matter to

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me" to "matter to me," "appealing" to "unappealing," "tell me about a person" to "show nothing about a person," and "of no concern to me" to "of concern to me." The sweat shirt involvement scale also contains three items related to the characteristics of high involvement that were adapted from Zaichkowsky (1994). The three questions are measured on a seven-point scale ranging from strongly disagree (1) to strongly agree (7). The three items include: "There are significant differences among various brands of sweat shirts," "I would prefer a specific brand of sweatshirts," and "I would be interested in reading the Consumer Report's article on sweat shirts."

Traylor and Joseph (1984) developed a scale to measure consumer involvement with blue jeans. Scale items included: "When other people see me using this product, they form an opinion of me," "You can tell a lot about a person by seeing what brand of this product he uses," "This product helps me express who I am," "This product is "me"," "Seeing somebody else use this product tells me a lot about that person," and "When I use this product, others see me the way I want them to see me." A seven-point Likert scale was used as the response scale, with 1 representing strongly disagree and 5 representing strongly agree.

Thomas, Cassil, and Forsythe (1991) developed an apparel involvement scale based on the items in the consumer involvement scale developed by Traylor and Joseph (1984). The scale contains two constructs of apparel involvement (i.e., dress to express personality, dress as a signaling device). The first construct, dress to express personality, contains three items, including "The clothes somebody wears tells me a lot about that person," "My clothes help me express who I am," and "You can tell a lot about a person by the clothes he/she wears." The second construct is dress as a signaling device and contains one item. The item is "When I wear one of my favorite outfits, others see me the way I want them to see me." A five-point Likert scale was used as the response scale, with 1 representing strongly disagree and 5 representing strongly agree.

O'Cass (2000) developed a questionnaire containing four constructs of involvement in relation to fashion clothing. The first construct is product involvement, containing 16 items. Examples of the items for product involvement are: "Fashion Clothing means a lot to me," "I consider Fashion Clothing to be a central part of my life," and "I am very involved in/with Fashion Clothing." The second construct of involvement related to fashion clothing is purchase-decision involvement, containing 10 items. Examples of the items for purchase-

decision involvement are: "Making purchase decisions for Fashion Clothing is significant to me," "Purchase decisions for Fashion Clothing are very important to me," and "I like being involved in making purchases of Fashion Clothing." The third construct of involvement related to fashion clothing is consumption involvement, containing eight items. Examples of the items for consumption involvement are: "The feeling of self-fulfillment I get from wearing Fashion Clothing is significant," "I like to think about wearing Fashion Clothing," and "Wearing Fashion Clothing means a lot to me." The fourth construct related to fashion clothing is advertising involvement, containing nine items. Examples of the items for advertising involvement are: "Ads about Fashion Clothing are of no concern to me," "Ads about Fashion Clothing are relevant to me," and "Ads about Fashion Clothing are interesting to me." A six-point, Likert type scale was used, with possible responses from strongly disagree to strongly agree.

Measures of Purchase Involvement

Mittal (1989) developed a four-item scale to measure purchase-decision involvement. Mittal asserted that purchase-decision involvement is distinguished from product-class involvement and that the literature on consumer involvement lacks a measure of purchase involvement. The scale is simple and is embedded directly in the purchase-decision context. Examples of scale items are "In selecting from the many types and brands of this product available in the market, would you say that." and the response can be "I would not care at all as to which one I buy " to "I would care a great deal as to which one I buy." For the question, "How important would it be to you to make a right choice of this product?" the response can be "Not at all important" to "Extremely important." For the question, "In making your selection of this product, how concerned would you be about the outcome of your choice?" the response can be "Not at all concerned" to "Very much concerned." Scale items were answered on a seven-point scale.

Zaichkowsky (1985; 1994) designed the Personal Involvement Inventory (PII) scale to measure a person's involvement with products, advertisements, or purchases, depending on the instructions with the scale. To measure involvement with purchase decisions, the words "various purchase decisions persons make" would be used in the instructions. For example, various purchase decisions that persons make are important/unimportant,

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boring/interesting, relevant/irrelevant, exciting/unexciting, mean nothing/mean a lot to me, appealing/unappealing, fascinating/mundane, worthless/valuable, involving/uninvolving, or not needed/needed. Scale items were answered on a seven-point scale.

Slama and Tashchian (1985) developed a six-point Likert scale to measure purchasing involvement. The scale includes 22 items. Examples of items include "On most purchase decisions, the choice I make is of little consequence," "I have little or no interest in shopping," "I am not interested in bargain seeking," "Sales don't excite me," "I am not really committed to getting the most for my money," "For expensive items, I spend a lot of time and effort making my purchase decision, since it is important to get the best deal," "Consumerism issues are irrelevant to me," "Thinking about what you are going to buy before going shopping won't make much difference in your long run expenditures," "Shopping wisely is a rather petty issue compared to thinking about how to make more money," and "I don't like to waste a lot of time trying to get good deals on groceries." All scale items were reverse scored.

Summary of Literature

The U.S. adolescent population was over 40 million in 2008 and is expected to continue growing. Many adolescents have large disposable incomes (Lewis 2002), and a large share of adolescent income is discretionary (Zollo, 1995). Teenage Research Unlimited showed that adolescents today spend almost all of their money (i.e., 98 percent) and adolescent shoppers spent over $170 billion in 2007 (Teens' Spending, 2007). Adolescents in the U.S. have grown up in a consumer-oriented society, in which consumption has become a leisure-time activity (Bush, Martin, & Bush, 2004; Syrett & Lammiman, 2004). Going to the mall to shop for clothes is a top activity for adolescents (Setlow, 2001). Zollo (1995) found that apparel is the most important product category to female adolescents, and the study of Alhabeeb (1996) showed that 26 percent of adolescents' income is spent on clothing and personal care. Adolescents also like to shop online (Dotson & Hyatt, 2005). The National Institute on Media and the Family (2000) reported that 67 percent of online adolescents had researched or bought products online.

Several definitions of clothing symbolism were reviewed. Gereluk (2008) defines symbolic clothing as a piece of clothing that signifies a part of an individual's identity. For thousands of years, human beings have communicated self-image through the non-verbal communication of clothing (Lurie, 2000). Davis (1992) states that clothing shapes self-concept management because clothing can non-verbally provide clues or visual metaphors for self-identity (Lurie, 2000). Solomon and Rabolt (2004) state that a person might perceive her self-concept as positive or negative; therefore, the person may use clothing to portray her self-image in an attempt to reinforce a positive self-image or to change a negative self-image. It is generally accepted by marketing and consumer researchers that individuals consume products and brands for their symbolic properties as much as for functional benefits (Elliott, 1999). Consumer goods can serve consumers as a means to promote and maintain their identities because of the symbolic meaning embedded in them (Leigh & Gabel, 1992). Persons also use possessions with the intent of bridging the gap between their actual and ideal selves, thereby gaining control over self-image.

Possessions were reviewed as a tool to define oneself, a tool to control self-image, a tool to classify social roles, and a tool to characterize different life stages. Individuals use goods as materials with which to create, foster, and develop their identity (Elliott & Wattanasuwan, 1998). Quester, et al. (2000) indicate that ownership or usage of a particular product with a particular image is often consistent with a person's definition of his or her self-concept. Roach-Higgins and Eicher (1992) indicate that clothing functions as an effective means of communication during social interaction, influencing persons' establishment of identities of themselves and others. Different possessions are used in different time periods of one's self-concept. During adolescent years, an individual desires possessions that allow him or her to engage in certain activities that are popular among adolescents.

Several theories were examined in relation to clothing symbolism. Symbolic interaction theory is one of the major theoretical perspectives in sociology (Beach et al., 2005). Symbolic interaction theory emphasizes humans as active, creative participants who construct their social world (McClelland, 2000). Symbolic interaction theory has been used to study person-to-person impression formation and the influence of culture on human dress (e.g., Johnson et al., 2008; Kaiser, 1990; Lennon & Davis, 1989). Sociologists consider the

symbolic interaction theory to be applicable to clothing usage from a theoretical perspective (Kaiser, 1990). Wicklund and Gollwitzer (1982) proposed the symbolic self-completion theory, indicating that an individual's sense of self is a collection of numerous characterizations of himself. To feel a sense of completion, an individual's ideal self-definitions and actual self-definitions must be congruent. Researchers have shown that clothing items are often used as symbols in the process of symbolic self-completion (Belk, 1985; Solomon & Douglas, 1987). Consumers use products to demonstrate their self-concepts (Sirgy, 1982b). Sirgy (1982b) developed the self and product image congruity theory, which states that behavior is affected by the congruity or incongruity between self-image and product-image. Several studies have shown that self and product image congruence can affect consumers' product preferences and their purchase intentions (Erickson, 1996; Mehta, 1999). Value placed on material symbols (e.g., garments) depends on commitment to group identity and the extent to which a symbol can be used to represent in-group identity.

Researchers have specifically studied adolescents and clothing symbolism. Overall, clothing can be viewed as an essential social tool in the lives of adolescents (Elliott & Leonard, 2004; Piacentini & Mailer, 2004). For example, Elliott and Leonard (2004) found that children form stereotypes about the owners of trainers. If a child is wearing branded trainers, they are seen as popular and able to fit in their peers. Piacentini and Mailer (2004) found that the clothing choices made by young persons are closely bound to their self-concepts and are used both as a means of self-expression and as a way of judging the persons and situations they face. Measures of clothing symbolism were also reviewed.

In addition to clothing symbolism literature, reference group literature was discussed. Reference groups are a source of instrumental and emotional support, offering a sense of belonging during periods of physical, emotional, and cognitive adjustment (Blackwell et al. 2001). Persons protect and modify their self-concepts in their interactions with others in reference groups, and persons often maintain their self-concepts by conforming to roles they have learned in reference groups. Multiple authors have defined the term "reference group." The term "reference group" refers to a group to which an individual orients himself or herself, regardless of whether the individual is actually a member of the group. In a related

vein, Tarrant (2002) views reference groups as valuable networks through which conceptions of identity and self-concept are developed.

Reference group influences are of several types. Normative influence manifests when individuals alter their behaviors or beliefs to meet the expectations of a particular group; for example, a group's norms may influence what one wears (Blackwell et al., 2001). The informational function of reference groups imposes no norms on the individual (Lessig & Park, 1978). Utilitarian reference group influence on consumers' behaviors occurs when the reference group controls important rewards and punishments (Peter & Olson, 2005). Value-expressive influence occurs when a need exists for psychological association with an aspirational group (Blackwell et al., 2001).

Four theories related to reference groups were reviewed. Consumer socialization theory explains the processes by which young persons acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace. Several studies have shown that family communication serves an important role in the consumer socialization process (Bush et al., 1999; Lachance et al., 2000). The social comparison theory was developed to help explain small-group behavior in terms of ability and opinion evaluation (Rudd & Lennon, 2001). Festinger (1954) posits that humans have a drive to evaluate themselves by comparison to some standard. Social comparison increases one's ability to evaluate his self-concept and offers an occasion for altering the self-concept (Lee, 1998). Researchers have applied social comparison theory to the evaluation of appearance (Kim & Lennon, 2007; Tiggemann & McGill, 2004). Social identity theory, proposed by Tajfel and Turner (1979), holds that the concept of social identity is central in understanding intergroup relations. Social identity can be defined as that part of the individual's self-concept that derives from his or her knowledge of membership to a social group or groups (Tajfel & Turner, 1986). The desire for a positive social identity is moderated by the degree to which the group identity is integrated in the self-concept (Schmitt et al., 2000). Conformity is the desire of an individual to fit in a certain group (Blackwell et al., 2001). Due to the desire to protect self-concept in social situations, persons may change their actions to achieve consistency with real or imagined expectations and behaviors of groups or other individuals (Kiesler & Kiesler, 1970). Peer conformity is an assessment of whether or not individuals adopt a certain course of action sanctioned by their peer group (Santor et al., 2000).

Becoming a member of a peer group is one of the primary developmental tasks of adolescence (Coleman & Hendry, 1990). Several studies have addressed the effect of conformity on clothing behavior (Chen-Yu & Seock, 2002; Kim et al., 2008).

Reference groups play an important role in adolescents' behavior (Chen-Yu & Seock, 2002; Grant & Stephen, 2005; Makgosa & Mohube, 2007; Nelson & McLeod, 2005; Palan, 2001; Vieria, 2009). Chen-Yu and Seock (2002) found that friends are the most important clothing information source for both females and males. Grant and Stephen (2005) also found that peer groups are fundamental to the decision-making process for purchasing fashion clothing. Nelson and McLeod (2005) found that perceived brand consciousness of friends is positively related to brand consciousness for U.S. adolescents. Makgosa and Mohube's (2007) findings demonstrated that peer influence is greater for products consumed in public than for products consumed in private and are a necessity.

Parents are the primary socialization agents for inculcating rational, socially desirable, and effective consumption behavior for adolescents (Ward et al., 1986). In discussion, parents encourage young generations to develop skills in selecting and interpreting product information. Palan (2001) indicates that parents influence the development of children by purposefully training, being role models, and providing opportunities to learn. The author further suggests that a parent's general socialization orientation or parental style serves as a context that impacts how parents and children interact in purchase decisions. The roles of parents in attempts to teach adolescents to be effective consumers include experiences with the use of money and ways to shop for quality products, how to compare products effectively, and how to buy products on sale, personal brand preferences, and abilities to distinguish facts for exaggerated advertisements (Assael, 1992). Moschis (1987) points out that parental influence on consumer behavior is situation-specific, varying across products and stages in decision-making processes. Meeus and Dekovic (1995) found that parents influence the process of identity formation. Parents have a positive influence on adolescents' development of school identity and work identity. Beyers and Goossens (2008) studied short-term changes in parenting and identity formation during late adolescence, and found that parenting and identity formation are dynamically interlinked. These results underscore that parents remain an important source of socialization as children and adolescents develop.

Media also play an important role in the function of reference group. Nelson and McLeod (2005) examined marketing communication tactics in the context of media socialization and found that exposure to movies is positively related to brand consciousness for U.S. adolescents. In a cross-cultural context, this study showed that U.S. adolescents are more likely to purchase brands they see in movies than are Austrians or French adolescents. Grant and Stephen (2005) examined key communicating factors that influence adolescent girls in their purchasing decisions for fashion clothing and found that advertising media are influential. The most influential advertising media are magazines that are purchased or free (e.g., in-store house magazines, fashion advertisements), followed by billboard, cinema, satellite, and "free-view" shopping channels.

Limited studies have addressed the influence of popular boys or girls on adolescents' behavior. A recent study by Owens and Duncan (2009) is an analysis of focus-group discussions among adolescent girls on the topic of popularity. A conclusion from this work is that the adolescent girls see popularity as being concerned with public visibility, prominence, social power, and influence rather than likeability. The adolescents were unanimous in their view that popular girls stand out from their peers through being pretty and fashionable. Popular girls were also viewed as having great opportunity to be fashionable through the wealth of parents or at least though their ability to persuade parents to provide money for fashionable clothes. Adolescent girls in the focus groups expressed the view that popular girls are uniform in what they wear and the ways in which they present themselves. This uniformity of dress and appearance seems to enable popular girls to be viewed as a distinct group. The adolescent girls in the study indicated that popular girls have power over other students. They use this power in a variety of ways, including threats, verbal harassment, spreading rumors, and manipulating friendships. Generally, adolescent girls expressed intimidation by and fear of facing up to popular girls. Measures of reference group influence were also reviewed.

Researchers have recognized the concept of involvement as having an important role in explaining consumer behavior, including shopping values, attitude formation, consumer satisfaction, and brand loyalty (Belleau et al., 2007; Chang et al., 2004; Yurchisin & Johnson, 2004). McNamara (2008) defines involvement as the amount of time, thought, energy, and other resources persons devote to the purchase process. Zaichkowsky (1985) defines

involvement as a person's perceived relevance of an object based on inherent needs, values, and interests.

Two types of involvement, production involvement and purchase involvement, were reviewed. Bloch (1986) defines product involvement as an unobservable state reflecting the amount of interest, arousal, or emotional attachment a consumer has with a product. Enduring involvement (Richins & Bloch, 1986) and ego involvement (Beatty et al., 1988) are two types of product involvement. Another type of involvement is purchasing involvement. Ganesh et al. (2000) define purchasing involvement as involvement that relates to the level of concern for or interest in the purchase process, triggered by the need to consider a particular purchase. Purchase involvement can be understood as the cost, effort, or investment in a purchase (Mittal & Lee, 1989).

In the field of consumer behavior, an important distinction has been made between low and high levels of involvement (Day et al., 1995). At a low level of involvement, persons do not make an effort to process the advertising message (Oh & Jasper, 2006). Persons with a high level of involvement devote more information processing efforts to specific elements of the advertisement than do persons with a low level of involvement. One product category that elicits a high level of product involvement is clothing (Oh & Jasper, 2006).

Several studies have addressed adolescents' product involvement and trend involvement (Aaker, 2005; Haytko & Baker, 2004). Aaker (2005) found that the more the adolescent interacted with peers, the more the adolescent was involved with the product, and then the more the adolescent engaged in initiation, information search, and product assessment. Haytko and Baker (2004) found that adolescents have a high level of trend involvement. They are frequently at the mall, visit many stores, and enjoy shopping. They have the desire to look at a large number of products and brands. They receive pleasure directly from the time they spend exploring the shopping environment. Furthermore, measures of involvement were reviewed.

CHAPTER III

FRAMEWORK AND RESEARCH QUESTIONS

The purpose of this research is to examine the relationship between each of three independent variables (i.e., reference groups, clothing symbolism, and clothing involvement) and adolescents' clothing purchase intentions and clothing behavior, and whether the three independent variables are predictors of adolescents' clothing purchase intentions and clothing behavior. A conceptual model that forms the framework for this study was developed by integrating several theories and propositions in the literature (see Figure 3.1). The model includes three sections. The first section of the model is illustrated in the top section of the framework, showing the role of perceptions of reference groups' clothing behavior or their opinions concerning clothing behavior in adolescents' clothing purchase intentions and clothing behavior. The center section of the model illustrates the role of perceptions of clothing symbolism in adolescents' clothing purchase intentions and clothing behavior. The bottom section of the model illustrates the role of clothing involvement in adolescents' clothing purchase intentions and clothing behavior. A square box is used to indicate a variable that was not measured directly in the study, an oval shape indicates a variable that was measured directly in the questionnaire, and an octagon shape is used to indicate a variable for which a score was calculated by the measures of other variables.

Perceptions of Reference Groups' Clothing Behavior or Opinions
(Research Questions 1 to 4)

The top section of the model illustrates the role of adolescents' perceptions of reference groups' clothing behavior or opinions in their own purchase intentions and clothing
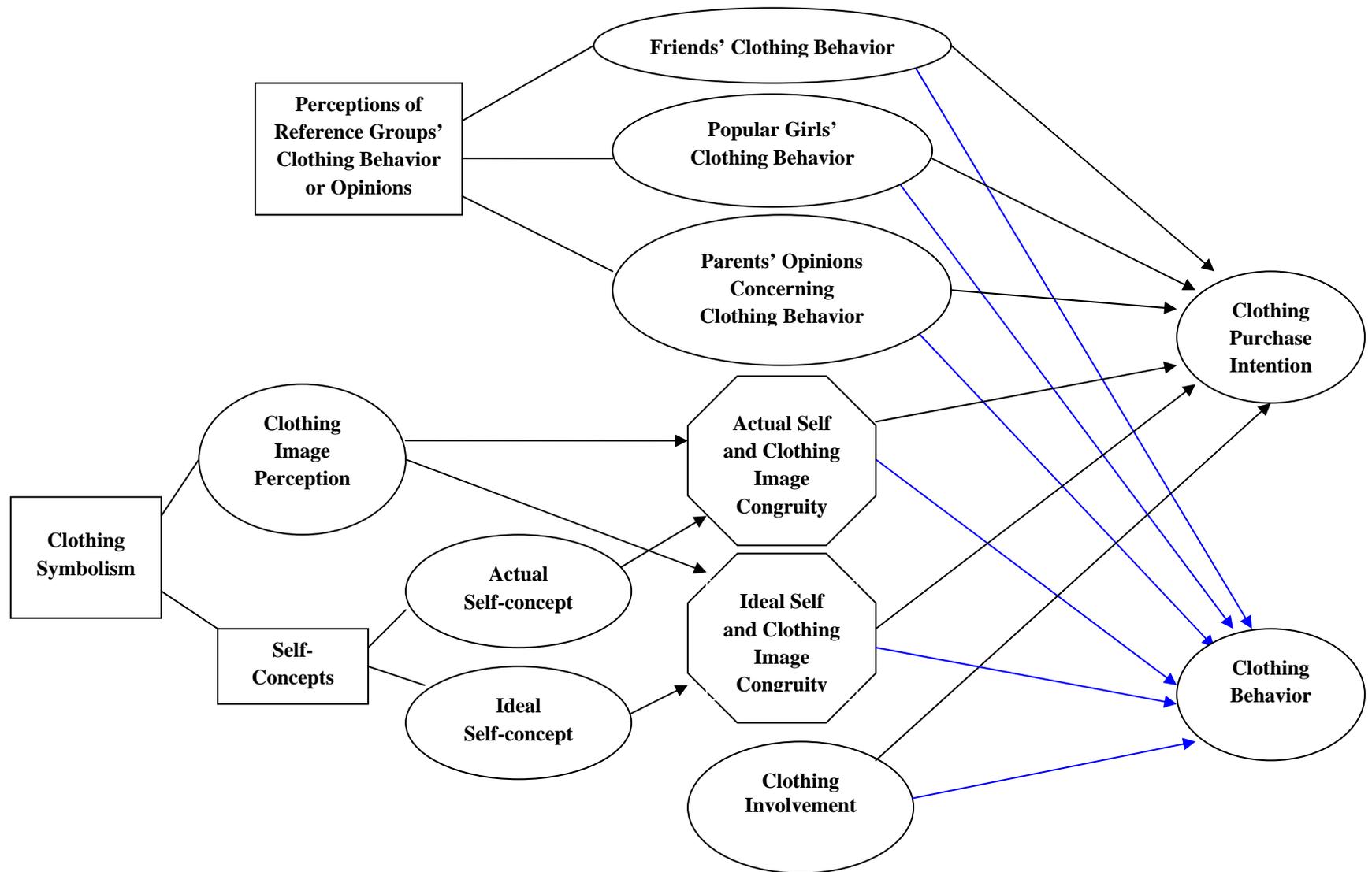
Figure 3.1. **Roles of perceptions of reference groups, clothing symbolism, and clothing involvement in female adolescents' clothing purchase intentions and clothing behavior**

behavior. Reference groups are a source of instrumental and emotional support, offering a sense of belonging during periods of physical, emotional, and cognitive adjustment.

Reference groups are aspects of the micro social environment for consumers (Peter & Olson, 2005). Social interactions with reference groups are often direct and face to face, which can have immediate influence on consumers' cognitive, affective, and behavioral responses to marketing strategies. Reference groups are important in transmitting to individual consumers the cultural meaning of the overall society, subculture, and social class. Through exposure to social situations, consumers acquire knowledge and skills from their reference groups to make purchase decisions (Ward, 1974). Friends, popular girls, and parents are included in the model as three important reference groups that influence adolescents' clothing purchase intentions and clothing behavior.

Perceptions of Friends' Clothing Behavior

Peer groups influence adolescent socialization and identity by allowing young persons to explore individual interests and uncertainties, while retaining a sense of belonging and continuity within a group of friends (Coleman & Hendry, 1990). The social identity theory and the confirmation theory support the roles of peers in adolescents' clothing behavior. The social identity theory, proposed by Tajfel and Turner (1979), suggests that social identity results from categorization in the social group (Turner et al., 1987) and assumes that people are motivated to see themselves positively (Schmitt, Silvia, & Branscombe, 2000). The desire for a positive social identity is moderated by the level of group identification. Those who are low in identification with the group strive to protect their individual identities, whereas highly identified group members are more likely to protect the identity of the group as a whole. Tarrant (2002) found that as the level of identification with in-groups increased, participants reported increasingly favorable evaluations of their own group. In addition to the social identity theory, the conformity theory supports peer groups' influence on adolescents' clothing behavior. The theory suggests that people have the desire to fit in a group (Blackwell, Miniard, & Engel, 2001). Becoming a member of a peer group is one of the primary developmental tasks of adolescence (Coleman & Hendry, 1990). Confirmation plays an important role in adolescents' lives (Damhorst, Miller-Spillman &

Michelman, 2005). Peer conformity is an assessment of whether or not individuals adopt a certain course of action sanctioned by their peer group (Santor, Messervey, & Kusumakar, 2000). These propositions are supported by research findings. Chen-Yu and Seock (2002) found that conformity was one of the motivations for both male and female adolescents' clothing-buying behavior. Kim, Rhee and Yee (2008) found that adolescents showed the greatest conformity to peers, which leads to clothing conformity.

Stone (1962) theorized that the analysis of appearance, including clothing, is a part of the social interaction process and a necessary precondition to verbal exchange; therefore, perception of dress, as evidenced by an awareness of the modal pattern, may be an important aspect of group interaction and conformity to the mode, a prerequisite to peer acceptance among adolescents. Accordingly, the perceptions of friends' clothing behavior is expected to have a significant relationship with adolescents' clothing purchase intentions and clothing behavior; therefore this relationship was proposed and included in the framework.

Perceptions of Popular Girls' Clothing Behavior

The social comparison theory, proposed by Festinger (1954), suggests that social comparison is a motivating force in human behavior. An individual has a need to compare himself or herself on various attributes with other individuals, in order to judge the consequences of his or her behavior when physical evidence, such as an award or punishment, is unavailable. According to Botta (1999), people often automatically compare themselves to others, without conscious thought. These propositions are supported by research findings. Goethals (1986) found that people often expect to perform as well as other people who are similar to them, and feel pleased when they do perform as well and feel displeased when they do not. Richins (1991) found that the more women perceived a deficit between idealized advertising images of female models and their own appearance, the more dissatisfied they were with their bodies. Tiggemann and McGill (2004) also showed that women exposed to images of thin idealized female beauty experience increased negative moods and body dissatisfaction, and these effects are mediated by the amount of social comparison.

Blackwell et al. (2001) defined aspirational groups as groups with whom the individual aspires to associate or whose norms, values, and behavior the individual exhibits a desire to adopt. The influence of aspirational groups, though often indirect, can play a significant role in product choices. For most adolescent girls, popular girls are considered a group against which they compare themselves; therefore, the perceptions of popular girls' clothing behavior is the second component of the influence of perceptions of reference groups included in the model. Adolescent girls' perceptions of popular girls' clothing behavior are expected to play a significant role in their clothing purchase intentions and clothing behavior.

Perceptions of Parents' Opinions of Clothing Behavior

Family is an aspect of the micro social environment for consumers (Peter & Olson, 2005). Consumer socialization theory supports the roles of parents in adolescents' clothing purchase intentions and clothing behavior. Ward (1974) refers to consumer socialization as the processes by which young persons acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace. Palan (2001) indicates that parents influence the development of children by purposefully training, being role models, and providing opportunities to learn, and a parent's general socialization orientation or parental style serves as a context that impacts how parents and children interact in purchase decisions. These propositions are supported by research findings showing that family communication serves an important role in the consumer socialization process. Bush, Smith, and Martin (1999) found that parental communication about consumption-related activities is related positively to attitude toward advertising. Lachance, Legault and Bujold (2000) found that family communication contributes to adolescent participation in family consumer tasks and decisions. Depending on the parenting style, the adolescent's participation in family consumer tasks and decisions would be different. These results underscore that parents continue to be an important source of socialization as children and adolescents develop; therefore, adolescent girls' perceptions of parents' opinions of clothing behavior are expected to play a significant role in the girls' clothing purchase intentions and clothing behavior. The perceptions of parents' opinions of clothing behavior are included as the third component of

perceptions of reference groups' clothing behavior or opinions.

Based on the theories and previous studies discussed above, four Research Questions were proposed to examine the relationship between research participants' perceptions of reference groups' clothing behavior or opinions and their clothing purchase intentions, as well as the relationship between participants' perceptions of reference groups' clothing behavior or opinions and their clothing behavior (see Figure 3.2). Four outfit images are included in this study (i.e., sexy, conservative, springy, sporty). The selection of the four outfits is discussed in Chapter 4, Method. Because the influence of perceptions of reference groups' clothing behavior or opinions was expected to differ for each of the four different outfit images, analysis and discussion for each of the four different outfit images are separate for each Research Question.
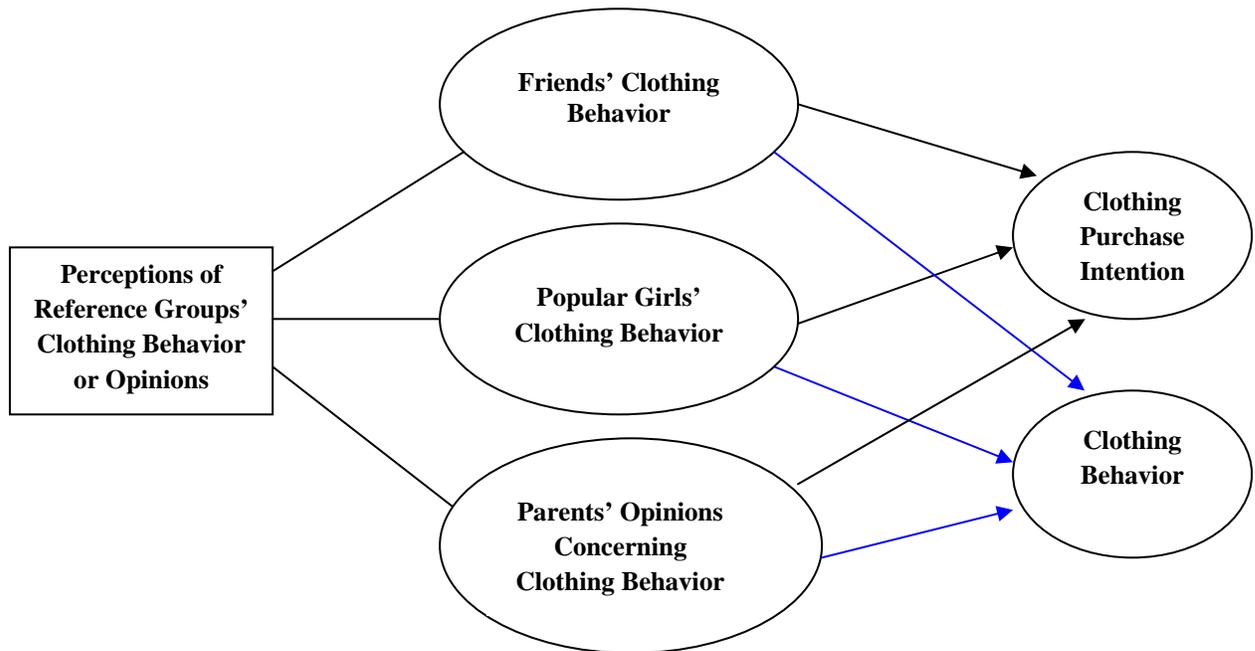
Figure 3.2. Roles of perceptions of reference groups in female adolescents' clothing purchase intentions and clothing behavior

Research Question 1: For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions of clothing behavior) significantly related to girls' clothing   purchase intentions?

Research Question 2: For each of the four different outfit images, which of the three

perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing

behavior, popular girls' clothing behavior, or parents' opinions of clothing behavior)

best predicts girls' clothing purchase intentions?

Research Question 3: For each of the four different outfit images, are the three perceptions

of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior,

popular girls' clothing behavior, or parents' opinions of clothing behavior)

significantly related to girls' clothing behavior?

Research Question 4: For each of the four different outfit images, which of the three

perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing

behavior, popular girls' clothing behavior, or parents' opinions of clothing behavior)

best predicts girls' clothing behavior?

Clothing Symbolism (Research Questions 5 to 8)

Wicklund and Gollwitzer (1982) proposed the symbolic self-completion theory,

indicating that in order to feel a sense of completion, an individual's ideal self-definition and

actual self-definition must be congruent, and he or she needs others to acknowledge his or

her particular self-definition. Individuals will engage in self-symbolizing behavior, such as

purchasing, wearing, or displaying symbols, with the expectation that others will recognize

the symbols and comprehend their self-definitions. Belk (1985) indicated that people often

use possessions with the intent to bridge the gap between their actual selves and ideal selves,

thereby gaining control of their self-image. Consistently, Heath and Scott (1998) indicated

that many purchases made by consumers are directly influenced by the image that they have

of themselves. People may buy a product because, among other factors, they feel the product

enhances their own self-images.

Gereluk (2008) defined symbolic clothing as a piece of clothing that signifies a part

of an individual's identity. The clothing must have a clear, communicable intent that goes

beyond merely making a fashion statement or a specific preference for style taste. Piacentini

and Mailer (2004) explored the subject of symbolic consumption with specific reference to

clothing in the adolescent market. They found that clothing was viewed as an essential social tool in the lives of adolescents, and the clothing choices made by young people were closely bound to their self-concepts and were used as a means of self-expression.

According to the self-image/product-image congruity theory proposed by Sirgy (1982a), depending on a product's relationship to an individual's actual or ideal self-concept, each individual might view the product as portraying symbols different from those viewed by others. Sirgy uses the relationship between the image of a product and a person's actual self-concept (i.e., actual self and clothing image congruity) and the relationship between the image of a product and a person's ideal self-concept (i.e., ideal self and clothing image congruity) to evaluate the symbolism of the product. Different degrees of congruity between the product image and a person's actual or ideal self-concept will lead to different levels of acceptance of a particular product.

Based on previous theories, propositions, and research results, the section on "Perceptions of Clothing Symbolism" in the model in Figure 3.1 starts from the "Clothing Image Perceptions" and "Self-Concepts" variables. Two types of self-concepts are included in the model, actual self-concept and ideal self-concept. The relationship between the perceptions of clothing image and actual self-concept results in "Actual Self and Clothing Image Congruity." The relationship between the perceptions of clothing image and ideal self-concept results in "Ideal Self and Clothing Image Congruity." These two types of congruity represent two types of clothing symbolism, which are expected to play significant roles in adolescents' clothing purchase intentions and clothing behavior. Outfits with images that are perceived as congruent with the actual or the ideal self are expected to be purchased or worn often, because such outfits may be used to define a participant's actual self or reflect her ideal self.

Based on the theory and previous studies discussed above, four Research questions were proposed to examine the relationship between clothing symbolism and clothing purchase intentions and the relationship between clothing symbolism and clothing behavior (see Figure 3.3). Four outfit images are included in this study (i.e., sporty, conservative, sexy, springy). The influence of clothing symbolism was expected to differ for each of the four different outfit images, therefore the analysis and discussion are separate for each of the four

different outfit images for each Research Question.
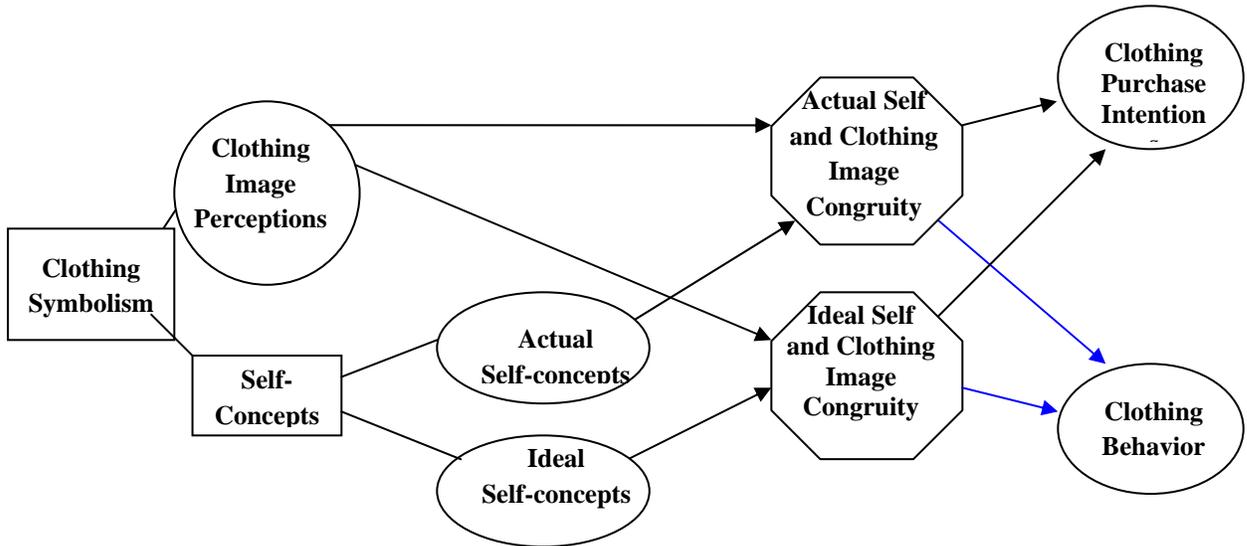
Figure 3.3. Roles of clothing symbolism in female adolescents' clothing purchase
intentions and clothing behavior

Research Question 5: For each of the four different outfit images, are the two types of
clothing symbolism (i.e., actual self and clothing image congruity, ideal self and
clothing image congruity) significantly related to girls' clothing purchase intentions?

Research Question 6: For each of the four different outfit images, which of the two types of
clothing symbolism (i.e., actual self and clothing image congruity, ideal self and
clothing image congruity) best predicts girls' clothing purchase intentions?

Research Question 7: For each of the four different outfit images, are the two types of
clothing symbolism (i.e., actual self and clothing image congruity, ideal self and
clothing image congruity) significantly related to girls' clothing behavior?

Research Question 8: For each of the four different outfit images, which of the two types of
clothing symbolism (i.e., actual self and clothing image congruity, ideal self and
clothing image congruity) best predicts girls' clothing behavior?

Clothing Involvement (Research Questions 9 to 12)

The lower section of the model in Figure 3.1 illustrates the role of clothing involvement in adolescents' clothing purchase intentions and clothing behavior. Zaichkowsky (1985) defined involvement as a person's perceived relevance of an object based on inherent needs, values, and interests. Bloch (1986) defined product involvement as an unobservable state reflecting the amount of interest, arousal, or emotional attachment a consumer has with a product, and each consumer's levels of product involvement lie along a continuum and vary according to product category. In the field of consumer behavior, an important distinction has been made between low and high levels of involvement (Day, Stafford, & Camacho, 1995). The level of involvement affects the extent to which information is processed and the extent to which importance is assigned to product attributes (Browne & Kaldenberg, 1997).

Oh and Jasper (2006) found that at a low level of involvement, persons make no effort to process the message of an advertisement; however, they still form attitudes toward the product through peripheral processing. Without carefully examining product-relevant information, they base their product attitudes on peripheral cues (Miniard et al., 1991). These propositions are supported by research results. Yurchisin and Johnson (2004) specifically examined consumers' involvement with apparel products and found that when consumers exhibit a high level of clothing involvement, they are likely to purchase clothing products compulsively. McNamara (2008) used two dimensions, level of involvement and type of purchase (i.e., rational, emotional), to study consumer behavior and found that high-involvement/rational purchases tend to be linked to high cost. Low-involvement/rational purchases are related to items consumers buy out of habit, without much thought. High-involvement/emotional purchases are associated with possessions and events such as jewelry, weddings, and holiday travel plans. When the gratification one receives from a product or service is emotional, but fleeting, this product/service is categorized in the low-involvement/emotional group. For low-involvement/emotional purchases (e.g., movies, candies, entertaining magazines), not a great deal of time is spent thinking about the purchases. The cited studies of involvement emphasize that level of product involvement

influences consumers' product purchase behaviors.

One product category that elicits a high level of product involvement is clothing (Engel et al., 1986; Francis, 1992; Oh & Jasper, 2006). Engel et al. (1986) suggest four reasons that clothing is a high involvement product: (a) clothing is perceived as enhancing one's self-image, (b) many clothing items are costly, (c) the risks of a wrong decision are high, and (d) the purchase usually has high personal relevance to the decision maker. Fashion involvement and time spent shopping were significantly and positively related. These researchers emphasize that clothing is a high-involvement product, and thus consumers may place high levels of importance on whether to buy (i.e., clothing purchase intentions) or to wear (i.e., clothing behavior) a specific garment. Based on the above propositions and previous research results, adolescents' clothing involvement is included in the model in Figure 3.1 as one of the variables that contributes to adolescents' clothing purchase intentions and clothing behavior.

Based on previous studies discussed above, four Research Questions were proposed to examine the relationship between clothing involvement and clothing purchase intentions and the relationship between clothing involvement and clothing behavior (see Figure 3.4). Four outfit images are included in this study (i.e., sporty, conservative, sexy, springy). The influence of clothing involvement was expected to differ for each of the four different outfit images, therefore, analysis and discussion are separate, for each of the four different outfit images for each Research Question.
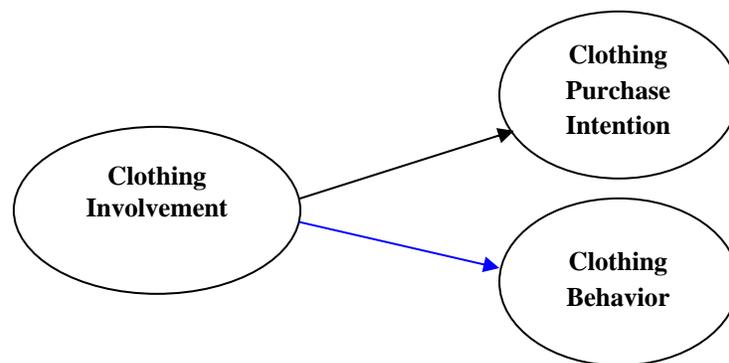
Figure 3.4. Roles of perceptions of clothing involvement in female adolescents' clothing purchase intentions and clothing behavior

Research Question 9: Does girls' clothing involvement contain multiple constructs? For each of the four different outfit images, are the constructs of clothing involvement significantly related to girls' clothing purchase intentions?

Research Question 10: Does girls' clothing involvement contain multiple constructs? For each of the four different outfit images, which of the constructs of clothing involvement best predicts girls' clothing purchase intentions?

Research Question 11: Does girls' clothing involvement contain multiple constructs? For each of the four different outfit images, are the constructs of clothing involvement significantly related to girls' clothing behavior?

Research Question 12: Does girls' clothing involvement contain multiple constructs? For each of the four different outfit images, which of the constructs of clothing involvement best predicts girls' clothing behavior?

Examination of the Relationships and Best Predictors among All Variables Included in the Study for Adolescents' Purchase Intentions and Clothing Behavior (Research Questions 13 to 16)

Research Questions 13 and 15 were generated to examine which variables among the six proposed independent variables (i.e., friends' clothing behavior, popular girls' clothing behavior, parents' opinions concerning clothing behavior, clothing symbolism, clothing involvement) are significantly related to adolescents' clothing purchase intentions and adolescents' clothing behavior (see Figure 3.5). Research Questions 14 and 16 were proposed to examine which variables among the five proposed independent variables are the best predictors of adolescents' clothing purchase intentions and the best predictors of adolescents' clothing behavior. Analysis and discussion are separate for each of the four outfit images for each Research Question because the independent variables were expected to have different relationships with the dependent variables for each of the four outfit images.

Research Question 13: For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), and clothing involvement significantly related to girls' clothing purchase intentions?
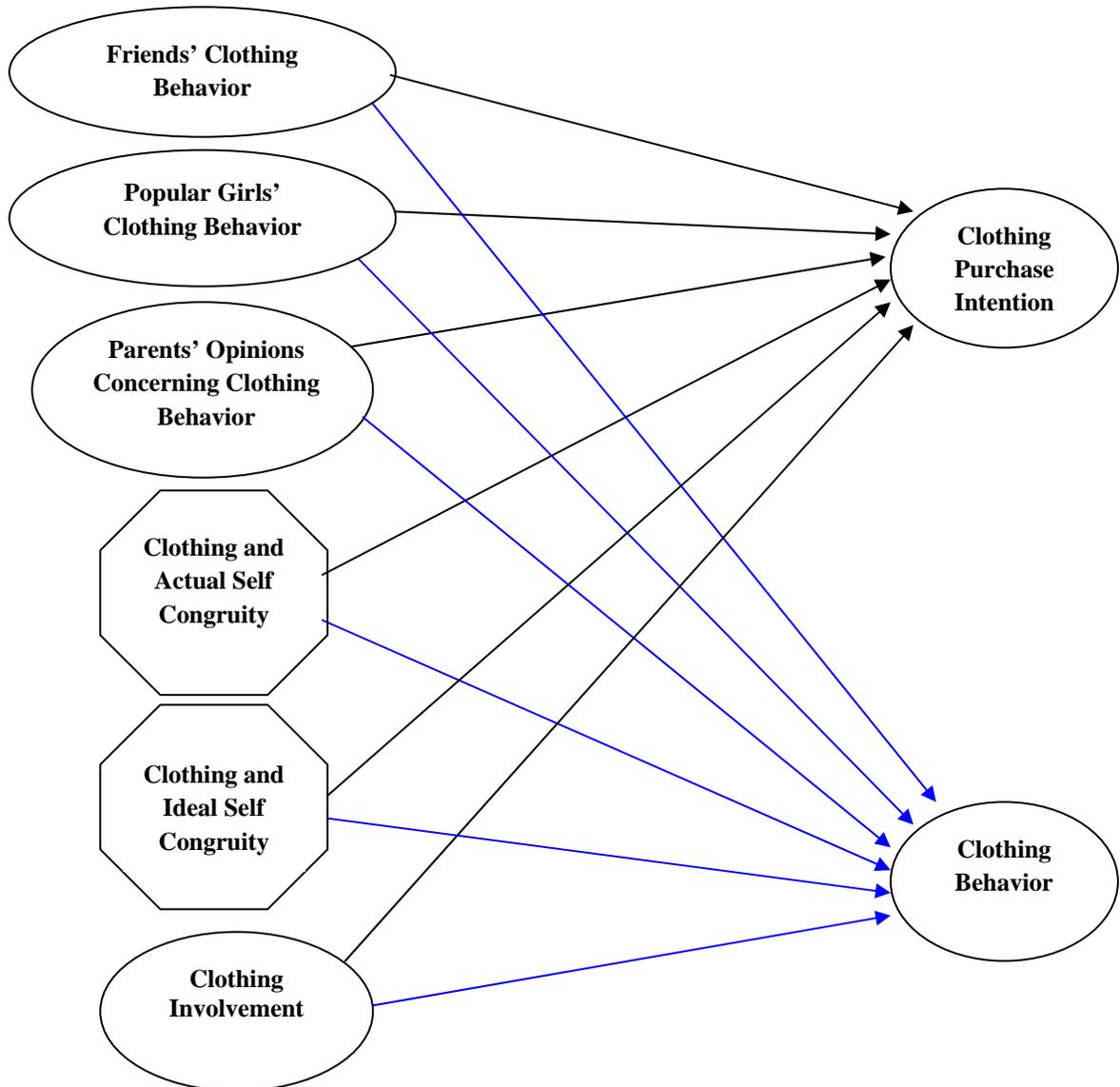
Figure 3.5. Roles of perceptions of reference groups, clothing symbolism, and clothing involvement in female adolescents' clothing purchase intentions and clothing behavior

Research Question 14: For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), or clothing involvement best predicts girls' clothing purchase intentions?

Research Question 15: For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), and clothing involvement significantly related to girls' clothing behavior?

Research Question 16: For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), or clothing involvement best predicts girls' clothing behavior?

CHAPTER IV

METHOD

The research method for this study is discussed in three sections in this chapter. The first section on instrument development describes the development of the questionnaire, measures of the variables, and efforts to increase the validity and reliability of the instrument. The second section discusses the selection of participants and the procedure for data collection. The final section explains how the data will be analyzed.

Instrument Development

A questionnaire was developed to serve as the measuring instrument. The questionnaire was first pilot tested and revised. After the revision, a second pilot test was conducted. Based on the results of the second pilot test, the questionnaire was further revised. The final questionnaire is shown in Appendix A. The questionnaire is separated into two parts (i.e., Part I and Part II) to avoid any influence of the outfit illustrations on the participants' answers to the questions regarding their actual selves and ideal selves. The first section of Part I measures participants' perceptions of their clothing involvement. The second and third sections of Part I measure participants' actual and ideal selves.

Part II of the questionnaire consists of five sections. The first section measures the participants' perceptions of the clothing image of each outfit. The clothing image questions are listed in the questionnaire, but the illustrations of the four outfits were shown to each participant on a sheet of paper separate from the questionnaire because the participants needed to view the outfits to answer the questions in Sections I through IV of Part II of the questionnaire. The separate illustration page made it easy for the participants to refer to that

page as they answered the questions in those four different sections. The second section of Part II measures participants' clothing behavior and purchase intentions. The third section of Part II measures participants' perceptions of their friends' clothing behavior and participants' perceptions of popular girls' clothing behavior. The fourth section measures participants' perceptions of their parents' opinions about clothing behavior. The fifth section measures participants' demographics.

Measures of Variables

Table 4.1 shows the questions used to measure each variable, including adolescent girls' perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior), clothing symbolism (i.e., actual self and clothing image congruity and ideal self and clothing image congruity), clothing involvement, clothing purchase intentions, and clothing behavior. Instead of multiple questions, only one question each was used to measure most variables because the participants in the study were young (i.e., ninth grade) adolescents. A short questionnaire was necessary because a longer questionnaire would require a longer attention span that most ninth grade adolescents may lack. If the participants were to lose their concentration, they might not address the content of each question carefully and might answer the questions inaccurately. The measurement of each variable is discussed in the following sections.

Measures of Perceptions of Reference Groups' Clothing Behavior or Opinions

Three sets of questions were developed to measure participants' perceptions of reference groups' clothing behavior or opinions. A Likert scale response format was used for all questions in this section, with answers ranging from 1 (strongly disagree) to 5 (strongly agree). The first set of questions, which measure participants' perceptions of their friends' clothing behavior, is listed in Section III of Part II of the questionnaire. Participants were asked if each outfit was an outfit their friends would wear. These questions were developed by the researchers based on the questions developed by Currie, Wesley, and Sutherland (2008) who examined individuals' relationships to peers and how these relationships

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influence their decisions in making travel choices. The second set of questions measures

Table 4.1 Measures of Variables

Variable	Question Section Number
Perceptions of Reference Groups' Clothing Behavior and Opinions	
Friends' Clothing Behavior (Outfits 1 – 4)	Part II, Section III, 1st set of questions
Popular Girls' Clothing Behavior (Outfits 1 – 4)	Part II, Section III, 2nd set of questions
Parents' Opinions Concerning Clothing Behavior (Outfits 1 – 4)	Part II, Section IV
Clothing Symbolism	
Perceptions of Clothing Image (Outfits 1 – 4)	Part II, Section I
Actual Self-Concepts	Part I, Section II
Ideal Self-Concepts	Part I, Section III
Clothing Involvement	Part I, Section I
Clothing Purchase Intention (Outfits 1 – 4)	Part II, Section II, 4th set of questions
Clothing Behavior (Outfits 1 – 4)	Part II, Section II, 1st three sets of questions
Demographics	Part II, Section V

participants' perceptions of popular girls' clothing behavior. In Section III of Part II of the questionnaire, participants were asked if each outfit was an outfit popular girls would wear. These questions were developed by the researchers based on the questions developed by Owens and Duncan (2009) who examined adolescents' perceptions of popular adolescents. To measure the opinions of parent(s) or adult(s) in the participants' households, participants were asked if each individual outfit was an outfit that their parent(s) or other adult(s) in their households would like them to wear. Adults in the household are included in addition to parents in the questions because adolescents may have guardians who are not their parents. These questions are included in Section IV of Part II of the questionnaire and were developed by the researchers based on the study by Currie et al. (2008) to examine family and peers influences on individuals' travel destination choices.

<u>Clothing Symbolism</u>

        Measurements of the clothing symbolism (i.e., actual self and clothing image congruity and ideal self and clothing image congruity) were adapted from a study by Erickson and Sirgy (1992) to investigate the relationship between self-concept/image and professional clothing image, based on the self-image product-image congruity theory (Sirgy, 1982a). Erickson and Sirgy (1992) measured participants' perceptions of clothing image and self-concepts (i.e., actual self-concepts and ideal self-concepts) first, and then calculated participants' actual self and clothing image congruity and ideal self and clothing image congruity by the differences between the scores for clothing image and actual self-concept and between the scores for clothing image and ideal self-concept, respectively. To calculate participants' clothing symbolism in the present study, actual self and clothing image congruity and ideal self and clothing image congruity are measured using the same method as that of Erickson and Sirgy (1992).

        <u>Measures of perception of clothing image</u>. To measure perception of clothing image, several focus groups were held to select four outfits that reflect four distinct clothing images, and a different focus group was held to select four adjectives to describe those four outfits. In the main data collection, participants were asked to use the four adjectives to evaluate each of the four outfits. The process for selecting clothing images was adapted from that of Erickson and Sirgy (1992), in which the authors selected illustrations of clothing styles that represented clothing generally considered appropriate for work and styles that are usually not considered appropriate for work. A group of women working in business and academia were shown the illustrations and asked to write one-word descriptions of each outfit, and then frequency counts were made of the responses. Five outfits found to have distinct images were used by Erickson and Sirgy.

        To select the clothing images in the present study, the method of Erickson and Sirgy (1992) was adapted. The researchers first collected a pool of illustrations of 42 outfits assumed to be appropriate for adolescent girls and assumed to be worn in different settings, such as school, religious events, outings, parties, and athletic activities. These illustrations were collected from three online sources; Glamour <glamour.com>; The Home Shopping Network <hsn.com>; and Le Redoute <leredoute.com>. These three online sources were

used because they provided the function of "My Virtual Model" from the Web site <mvm.com> to allow customers to virtually try on selected outfits, apply multiple styles and images of outfits to an online model, and print the images. The "My Virtual Model" function was important in the present study because it allowed the use of the same model with the same gestures to illustrate all outfits as well as control of model-related variables, such as the model's body type and complexion. The model's height was set at 5' 3" with a weight of 114 pounds, according to the 50th percentile for girls aged 15 in the United States (The National Center for Health Statistics, 2000). The median height and weight of such girls were used because the research participants were ninth grade girls, most of whom were 15 years old. The model's complexion was set at a neutral skin tone. The "My Virtual Model" Web site <myvirtualmodel.com> provides four choices of skin tone: a light Caucasian skin tone, a beige Asian skin tone, a dark bronze African American skin tone, and a neutral skin tone (the last of which is not for a definite racial type). Because the research participants were expected to be of various races, the neutral skin tone was selected to avoid portraying the complexion of a specific race. Each of the 42 illustrations was printed in color and centered on 8" by 11" paper. The model's head was removed to avoid the influence of such variables as hair and facial expression.

A focus group of 15 ninth grade girls from Hanover County High School located in central Virginia was recruited and worked together to eliminate the outfits they thought someone of their age might not wear; as a result, 21 outfits remained. Then, each of the 15 girls independently used a worksheet to write an adjective that best described each outfit. Based on their responses, a list of 19 adjectives was generated. The adjectives used to describe each outfit are listed in Appendix B. The list of 19 adjectives and the 21 outfit illustrations were shown to another group of 15 ninth grade girls, who were asked to select one word from the 19 adjectives that best described each of the 21 outfits. They were encouraged to use different words to describe the different outfits, although a word could be used more than once. Based on the frequency with which participants repeated adjectives, four outfits were selected. Outfit Q was selected because 10 out of the 15 participants used the same adjective "sporty" to describe the outfit (see Appendix B). Outfit R was selected because 9 participants used the same adjective "sexy" to describe the outfit. Outfit C was

selected because 9 participants used the adjectives "springy" or "cute" to describe the outfit. Outfit D was selected because 8 participants used the adjectives "classy" or "nice" to describe the outfit. The high frequency of repeating the indicated adjectives suggested that these four outfits might have distinctive clothing images; thus they were selected to be used in the questionnaire. The four outfits are shown in Figure 4.1.

A pilot test was administered to 20 middle school girls. The main goals of this pilot test were to determine if the instrument was easy to understand and if the images of the four selected outfits were different. Dissimilar images were desired to allow measurement of different clothing symbolism and different self-concepts. On average, participants took 10 minutes to complete the questionnaire. The participants did not ask any questions during the test, and they confirmed after completion that the questions were clear and the instructions were easy to follow.

To examine whether the images of the four selected outfits were different, the average scores for the participants' perceptions of each outfit with respect to the four adjectives (i.e., sporty, sexy, classy and nice, springy and cute) were compared. Results showed that the adjective "sporty" received the highest average score for describing Outfit 1 in Figure 4.1. The adjective "sexy" received the highest average score for describing Outfit 2. These results suggest that participants perceived Outfits 1 and 2 as significantly different images. However, the adjective "classy and nice" received the highest average score for describing both Outfits 3 and 4. Nonetheless, "springy and cute," the adjective pair originally used to describe Outfit 4, received a lower score than the adjectives "classy and nice," suggesting that Outfits 3 and 4 had similar images and Outfit 4 did not have a strong image as "springy and cute." Based on these results, Outfits 3 and 4 were removed.

To find other outfits to replace Outfits 3 and 4, the responses in the first focus group were reviewed. Because four outfits were selected in the first pilot test, the responses for the 17 remaining outfits out of the original 21 outfits were reviewed, and two outfits were selected. Outfit F was selected because six of the 15 participants used the same adjective, "conservative," to describe this outfit (see Appendix B). Outfit J was selected because four of the participants used the same adjective "springy" to describe the outfit. The four outfits are shown in Figure 4.2. A second pilot test was administered to 20 middle school and early high

Outfit 1 - Sporty

Outfit 2 - Sexy

Outfit 3 - Classy and Nice

Outfit 4 - Springy and Cute

Figure 4.1. Outfits and Adjectives Used in the First Pilot Test

Outfit 1 - Sexy

Outfit 2 - Conservative

Outfit 3 – Springy
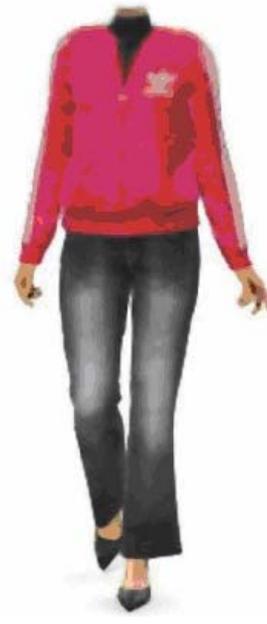
Outfit 4 - Sporty

Figure 4.2. Outfits and Adjectives Used in the Second Pilot Test

school girls. The main goal of this pilot test was to determine if the four outfits selected after the first pilot test had different clothing images. As in the first pilot test, the average scores for the participants' perceptions of each outfit with respect to the four adjectives (i.e., sexy, conservative, springy, sporty) were compared. The results showed that for Outfit 1 (see Figure 4.2); the adjective "sexy" received the highest average score. For Outfit 2, the adjective "conservative" received the highest average score. For Outfit 3, the adjective "springy" received the highest average score. For Outfit 4, the adjective "sporty" received the highest average score. These results suggested that the four outfits might have distinctive clothing images; thus they were selected to be included in the final instrument to represent the clothing images of "sexy," "conservative," "springy," and "sporty."

After obtaining the four adjectives (i.e., sexy, conservative, springy, sporty) and selecting the four outfits, the four adjectives were included in the final questionnaire to measure participants' clothing image perceptions of the four outfits. For example, each participant was asked if Outfit 1 was sporty, if Outfit 1 was conservative, if Outfit 1 was sexy, and if Outfit 1 was springy. These questions are listed in Section I of Part II of the questionnaire. All questions in this section have a Likert scale response format, with answers ranging from 1 (strongly disagree) to 5 (strongly agree).

Measures of actual and ideal self-concepts. The same four adjectives, "sporty," "conservative," "sexy," and "springy" (without the outfit illustrations) as for measuring perceptions of clothing images were used to measure actual self and ideal self. For the actual self-image measure, each participant was asked to rate herself as to how she actually saw herself in relation to each adjective, using a Likert scale response format with answers that ranged from 1 (strongly disagree) to 5 (strongly agree). These questions are listed in Section II of Part I of the questionnaire. For the measure of ideal self, instead of asking each participant how she saw herself, she was asked if she would like to be described by each adjective. These questions are listed in Section III of Part I of the questionnaire. Each has a Likert scale response format, with answers ranging from 1 (strongly disagree) to 5 (strongly agree).

Calculation of the clothing symbolism score. For each participant, with respect to each outfit, the two types of clothing symbolism the participant perceived (i.e., actual self and clothing image congruity and ideal self and clothing image congruity) were determined.

To determine each participant's clothing and actual self congruity with respect to each outfit, the difference between each participant's perception of actual self and clothing image congruity was calculated. For example, a participant's ideal self and clothing image congruity for Outfit 1, which represented the "sexy" image, was calculated by finding the difference between the participant's score on the degree to which she perceived Outfit 1 as having a "sexy" image and the participant's score on the degree to which her ideal self was "sexy." Similarly, the congruity between each participant's perception of a clothing image and her actual self-concept with respect to each outfit was determined by the difference between the participant's perception of the clothing image and her actual self-concept.

Measures of Clothing Involvement

Nine clothing involvement questions were adapted from the study by Chen-Yu (1995) to investigate consumers' sweatshirt involvement. The questions were modified to measure general clothing involvement, instead of sweatshirt involvement. The questions are listed in Section I of Part I of the questionnaire. Examples of the questions are "Clothing is important to me" and "The clothing a person wears tells me about that person." A Likert scale response format was used for all questions in this section, with answers ranging from 1 (strongly disagree) to 5 (strongly agree).

Measures of Purchase Intentions and Clothing Behavior

The purchase intention question, developed by the researchers, asks if a participant would purchase each outfit for hanging out with friends. The respective questions for the four outfits are listed in the last set of questions in Section II of Part II of the questionnaire. The reason for specifying the clothing behavior situation (i.e., when hanging out with friends) is to avoid the possibility of participants answering questions relative to situations unknown to the researcher or to situations in which they would not wear an illustrated outfit for the purpose of reflecting the actual self or of enhancing the ideal self, such as required use of a "sporty" uniform in physical education classes. The situation "when hanging out with friends" was selected because Milner (2004) found that, in a typical week excluding time spent in classroom instruction, high school students spent twice as much time with peers than

with parents or other adults. A Likert scale response format was used for all questions in this section, with answers ranging from 1 (very unlikely) to 5 (very likely).

To measure participants' clothing behavior, they were asked to refer to the four outfit illustrations in answering three questions on clothing behavior with respect to each outfit. The three clothing behavior questions were adapted from Erickson's study (1983). They deal with: (a) whether a given outfit is like what the participant usually wears when hanging out with friends, (b) how often the participant wears clothes like a given outfit when hanging out with friends, and (c) the extent to which a given outfit is similar to what the participant usually wears when hanging out with friends. These questions are listed in the first three sets of questions in Section II of Part II of the questionnaire. For the questions to measure whether each given outfit is what the participant usually wears when hanging out with friends, the response format is a Likert scale with answers ranging from 1 (strongly disagree) to 5 (strongly agree). The questions to measure how often a participant wears clothes like each given outfit are answered on a scale ranging from 1 (never) to 5 (very often). The questions to measure how similar each given outfit is to what the participant usually wears are answered on a scale ranging from 1 (not at all similar) to 5 (very similar). The first step to determine each participant's clothing behavior score was exploratory factor analysis to assess whether the three questions per outfit measure the same concept. If the responses to the three clothing behavior questions for a given outfit were found to load on the same factor, indicating that the three questions measure the same concept, each participant's clothing behavior score for that outfit was determined by the average of her scores on the three clothing behavior questions pertaining to that outfit. If the responses to the three clothing behavior questions for a given outfit did not load on the same factor, indicating that the three questions may not measure the same concept, the two responses in the same factor were used to calculate the average. The single response in the other factor was removed.

Measures of Demographics

Two demographic questions on each participant's age and race are included in the questionnaire. This information is used to describe the sample in terms of the ninth grade female participants' ages and races. These questions are listed in Section V of Part II of the questionnaire.

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Efforts to Increase the Validity and Reliability of the Instrument

Researchers need to identify threats to validity and reliability of their studies to establish trustworthiness (Creswell, 2003; Rudestam & Newton, 2001). Validity refers to the degree that a measure in fact measures what a researcher asserts it measures (Pallant, 2005; Rudestam & Newton, 2001). The validation of a scale involves the collection of empirical evidence concerning its use (Pallant, 2005). Two main types of validity are content validity and construct validity. Content validity refers to the extent to which a measurement reflects the specific content of the variable intended to be measured (Carmines & Zeller, 1991). If a test has good content validity, the "sameness" between the test and the variable intended to be measured is high; on the other hand, if the test and the variable intended to be measured are not the same, then content validity cannot be demonstrated (Burns, 1996). Construct validity involves testing a scale, not against a single criterion, but in terms of theoretically derived hypotheses concerning the nature of the underlying variable or construct.

To enhance the content validity in the present study, questions from previously established scales are incorporated in the measurement instrument. The questions were compared to the definitions of variables used in the present study. In addition, the instrument was reviewed by four members of the university community, and revisions were made to the instrument according to their recommendations. The instrument was then pilot tested with 23 middle and high school students. Following revisions as a result of that pilot test, a second pilot test was conducted with 20 eighth grade students. Based on the results of the second pilot test, the instrument was further revised. To increase the construct validity of the instrument, the operational definition of each variable was based on theories, propositions, and concepts from previous literature. A conceptual framework was developed. Each relationship in the conceptual framework was supported by theories, propositions, and concepts from previous literature.

Reliability refers to the ability of a measure to produce consistent results (Rudestam & Newton, 2001) and the degree to which a scale is free of random error (Pallant, 2005). One aspect of reliability is internal consistency (Pallant, 2005). This is the degree to which the items that make up the scale are all measuring the same underlying attribute. The common way to measure internal consistency is Cronbach's coefficient alpha. The statistic provides an indication of the average correlation among all of the items that make up the

scale. Values range from 0 to 1, with higher values indicating greater reliability. The current study measured internal consistency by employing Cronbach's coefficient alpha. Hair, Tatham, Anderson, and Black (1998) suggest that if a scale used to measure a construct has an alpha value greater than .70, the scale is considered reliable. If the alpha value of a measure is smaller than .70, the variable of the measure was not included in the study.

Participant Selection and Data Collection Procedure

Data collection was conducted at two high schools in Essex County, Virginia and one high school in Northumberland County, Virginia. There are approximately 40 miles between the two counties. Both are located within the greater region of Tidewater Virginia. Essex County is located in the Middle Peninsula of Virginia on the Rappahannock River. As of the census of 2000, there were 9,989 persons residing in the county. The median income for a household in the county was $37,395, and the per capita income was $17,994, lower than the U.S. median household income (i.e., $41,994) and per capita income (i.e., $21, 587). There is no large shopping mall in Essex County. There is Wal-Mart, Peebles, Cato, small gift shops, a small children's store, and second hand stores. Northumberland County is located in the Northern Neck of Virginia between the Rappahannock and Potomac rivers. As of the census of 2000, there were 12, 259 persons residing in the county. The median income for a household in the county was $38,129, lower than the U.S. median household income (i.e., $41,994). However, the per capita income was slightly higher than the U.S. average ($22, 917 and $21, 587, respectively). Like Essex County, there is no large shopping mall in Northumberland County. There is Peebles, Cato, small gift shops, and second hand stores.

Three-hundred fifty-three students in the ninth grade were recruited from ninth grade health and physical education classes. Female students were selected because the Web site <myvirtualmodel.com> for "My Virtual Model" does not include males' clothing, making it difficult to locate outfit illustrations for evaluation by male participants. The ninth grade was selected because ninth grade is the lowest grade in most high schools. As students transition from eighth grade to the first year of high school, they often face pressures in developing new friends and fitting into a new social environment. This is a critical time for adolescents in developing their self-concept identities (Richman, Clark, & Brown, 1985). In addition,

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many studies on high school adolescent clothing have focused on the behavior of adolescents in the 11th and 12th grades (e.g., see Chen-Yu & Seock, 2002; Martin & Bush, 2000; Miles, 1996). Increased research is needed on younger high school adolescents' clothing behavior.

Prior to data collection, the researchers applied to the Institutional Review Board (IRB) at Virginia Tech for exemption status for the study. Exemption was granted by the IRB because no risk exists for the participants (See Appendix C). The researchers also requested permission from the principal and academic counselor of each high school before conducting the data collection.

Before the data collection, the researchers provided a parental consent form and a stamped, self-addressed envelope for the teachers of the health and physical education classes to give each of their students for their parents to mail the signed parental consent forms to the researchers. After receiving at least 100 signed consent forms, the researchers went to each high school to administer the survey. The researchers gave each participant a consent form to sign before she received the questionnaire. After a participant returned the signed consent form, Part I of the questionnaire was given to her. For analysis purposes, a number code for each participant was used to match Part I and Part II of the questionnaire. The researcher put a number code on the top of each Part I of the questionnaire before giving out the questionnaire. A sticker with the same code was also attached to Part I of the questionnaire. After participants finished Part I of the questionnaire regarding clothing involvement, actual self, and ideal self, they were asked to return Part I of the questionnaire but keep the coding sticker. The researcher then gave each participant Part II of the questionnaire and a page with the four outfit illustrations. Each participant was told to write the number of her sticker at the top of Part II of the questionnaire and to refer to the illustrations in answering the questions in Sections I through IV of Part II of the questionnaire. Although the questionnaire includes written instructions, the researcher also gave verbal instructions to gain the participants' full attention and to help ensure that they had a clear understanding of how to complete the questionnaire.

Data Analysis

The data gathered from the questionnaire was recorded and analyzed by using the Predictive Analytics Software (PASW Statistics 18) and the Statistical Package for the Social Sciences (IBM SPSS Statistics 19). Descriptive statistics (i.e., frequency and percentage) were used to examine the demographic characteristics of participants. Preliminary data analysis included (a) verification of the outfit images, (b) comparison of actual and ideal self-concepts, (c) calculation and comparison of the types of clothing symbolism, (d) exploratory factor analysis for clothing involvement, (e) exploratory factor analysis for clothing behavior, and (f) calculation and comparison of the means, standard deviations, and ranges of all variables. Verification of outfit images included examination of whether participants' perception of the image of each of the four outfits was consistent with the image that each outfit was intended to represent. Specifically, repeated multivariate analysis of variance (MANOVA) was used to verify Outfit 1 represented the sexy image; Outfit 2 represented the conservative image; Outfit 3 represented the springy image; and Outfit 4 represented the sporty image. Comparison of actual and ideal self-concepts involved paired *t*-tests to determine whether the two types of self-concepts were significantly different for each of the four different outfit images. Calculation and comparison of the two types of clothing symbolism were done to determine each participant's score for the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) for each of the four different outfit images. Exploratory factor analysis for clothing involvement and exploratory factor analysis for clothing behavior were conducted to examine the constructs of the two variables that were measured by multiple items in order to determine whether each of these measures comprised one or more dimensions. Comparison of the means, standard deviations, and ranges of all variables measured in the study is reported.

Stepwise multiple regression analysis and standard multiple regression analysis were used to address the Research Questions. Standard multiple regression analysis was used to address Research Questions 1, 3, 5, 7, 9, 11, 13, and 15 because this type of analysis helps to answer questions about which independent variables have significant relationships with the dependent variable.

Additionally, several independent variables in standard multiple regression analysis predict the dependent variable simultaneously (Tabachnick & Fidell, 2001). All the independent (or predictor) variables are entered into the equation at the same time, and each independent variable is evaluated in terms of its predictive power, over and above that offered by all the other independent variables (Pallant, 2005). The software program used for the analysis considers all possible combinations and orders of variables in the equation and chooses the one that most accurately predicts the independent variable (Rubin, 2010). The significance level of the overall F value of the model denotes whether the model allows prediction at a rate better than chance (Tabachnick & Fidell, 2001). If the significance level of the F value is .05 or less ($p \leq .05$), the model is considered significant. In other words, there is only a 5 in 100 chance (or less) that a relationship does not exist.

Stepwise multiple regression analysis was used to address Research Questions 2, 4, 6, 8, 10, 12, 14, and 16 because the analysis helps to answer the Research Questions about which independent variables are the best predictors of the dependent variables. Furthermore, stepwise multiple regression analysis is a combination of forward and backward procedures. The first independent variable considered for entry into the equation is the one with the largest positive or negative correlation with the dependent variable, and the criterion for the inclusion of this most correlated variable is the F value for the variable (Howell, 2010). The F value for an independent variable indicates whether the entered variable allows the researcher to predict the dependent variable at a rate better than chance. In this study, an independent variable was entered in the equation only if the probability associated with the F test was less than or equal to 5 in 100 ($p \leq .05$). If the variable failed to meet this entry requirement, the regression procedure terminates with no independent variables in the equation. If the variable meets entry criterion, a second variable is selected based on the highest partial correlation. If it meets the entry criterion, it also enters the equation. After the first variable is entered, stepwise selection differs from forward selection. The first variable is examined to see whether it should be removed according to the removal criterion as in backward elimination. In the next step, variables not in the equation are examined for possible entry. Variables are removed until none remain that meet the removal criterion. Variable selection terminates when no more variables meet the entry or removal criteria.

In both standard and stepwise multiple regression analysis, R-squared (R^2) values were obtained to show the fit of the equation (i.e., how well future outcomes are likely to be predicted by the equation) (Pallant, 2005). R^2 also indicates the proportion of the variation in the dependent variable that is explained by the equation. In addition to showing the fit of the overall model, multiple regression analysis shows how well each independent variable predicts the dependent variable, controlling for each of the other independent variables (Tabachnick & Fidell, 2001). Two types of regression coefficients are shown for each independent variable. B is the unstandardized regression coefficient, which is given in terms of the units in which the variables are measured; the units of all variables in the equation may differ. Beta (β) is a standardized regression coefficient for which the units for all variables in the equation are changed to be the same. β coefficients are indicators of the relative importance of the independent variables in explaining the dependent variable. In other words, the variable with the largest β coefficient designates the most important predictor of the dependent variable.

Table 4.2 shows each Research Question, the type of regression used to examine the Research Question (i.e., standard multiple regression analysis or stepwise multiple regression analysis), and the independent and dependent variables of the study. A significance level of .05 was used as the standard for assessing the Research Questions.

Assumptions

In this study, it is assumed that the respondents accurately recognized and expressed their perceptions of clothing images and their self-concepts. The participants in the focus groups, pilot tests, and main data collection attended different schools, although the schools are all located within central and southwest Virginia. It is assumed that the respondents in the main data collection had the same level of ability to comprehend the questions as the participants in the focus groups and pilot tests. It is also assumed that the outfits selected by the focus group participants are outfits frequently worn by ninth grade students, and that the adjectives the focus group participants used to describe the outfits are similar to the adjectives that the participants in the main data collection would use to describe the images.

Finally, it is assumed that the respondents answered honestly, not according to their feelings of "right" or "wrong" answers.

Table 4.2 Independent and Dependent Variables for the Research Questions

Research Question & Type of Regression Used to Examine the Question	Independent Variables	Dependent Variables
Research Question 1 – Standard Multiple Regression For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) significantly related to girls' clothing purchase intentions? **Research Question 2 – Stepwise Multiple Regression** For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) best predicts girls' clothing purchase intentions?	• Friends' clothing behavior • Popular girls' clothing behavior • Parents' opinions concerning clothing behavior	Clothing purchase intentions
Research Question 3 – Standard Multiple Regression For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) significantly related to girls' clothing behavior? **Research Question 4 – Stepwise Multiple Regression** For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) best predicts girls' clothing behavior?	• Friends' clothing behavior • Popular girls' clothing behavior • Parents' opinions concerning clothing behavior	Clothing behavior
Research Question 5 – Standard Multiple Regression For each of the four different outfit images, are the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) significantly related to girls' clothing purchase intentions? **Research Question 6 – Stepwise Multiple Regression** For each of the four different outfit images, which of the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self clothing image congruity) best predicts girls' clothing purchase intentions?	• Actual self and clothing image congruity • Ideal self and clothing image congruity	Clothing purchase intentions
Research Question 7 – Standard Multiple Regression For each of the four different outfit images, are the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) significantly related to girls' clothing behavior?	• Actual self and clothing image congruity • Ideal self and	Clothing behavior

Research Question 8 – Stepwise Multiple Regression For each of the four different outfit images, which of the two types of clothing symbolism (i.e., actual self clothing image congruity, ideal self and clothing image congruity) best predicts girls' clothing behavior?	clothing image congruity	
Research Question 9 – Standard Multiple Regression Does girls' clothing involvement contain multiple constructs? For each of the four different outfit images, are the constructs of clothing involvement significantly related to girls' clothing purchase intentions? **Research Question 10 – Stepwise Multiple Regression** Does girls' clothing involvement contain multiple constructs? For each of the four different outfit images, which of the constructs of clothing involvement best predicts girls' clothing purchase intentions?	Clothing involvement	Clothing purchase intentions
Research Question 11 – Standard Multiple Regression Does girls' clothing involvement contain multiple constructs? For each of the four different outfit images, are the constructs of clothing involvement significantly related to girls' clothing behavior? **Research Question 12 – Standard Multiple Regression** Does girls' clothing involvement contain multiple constructs? For each of the four different outfit images, which of the constructs of clothing involvement best predicts girls' clothing behavior?	Clothing involvement	Clothing behavior
Research Question 13 – Standard Multiple Regression For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), and clothing involvement significantly related to girls' clothing purchase intentions? **Research Question 14 – Stepwise Multiple Regression** For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), or clothing involvement best predicts girls' clothing purchase intentions?	• Friends' clothing behavior • Popular girls' clothing behavior • Parents' opinions concerning clothing behavior • Ideal self and clothing image congruity and/or Actual self and clothing image congruity • Clothing involvement	Clothing purchase intentions
Research Question 15 – Standard Multiple Regression For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), and clothing involvement significantly related to girls' clothing behavior?	• Friends' clothing behavior • Popular girls' clothing behavior • Parents' opinions concerning clothing behavior • Ideal self and	Clothing behavior

Research Question 16 – Stepwise Multiple Regression For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), or clothing involvement best predicts girls' clothing behavior?	clothing image congruity and/or Actual self and clothing image congruity • Clothing involvement

CHAPTER V

RESULTS

In this chapter, the results of the data analysis are presented and discussed in four sections. The first section provides a description of the profiles of the participants. The second section is a discussion of the results of the preliminary data analysis, including seven sections, (a) verification of outfit images, (b) comparison of actual self and ideal self-concepts, (c) calculation and comparison of the two types of clothing symbolism, (d) exploratory factor analysis of clothing involvement, (e) exploratory factor analysis of clothing behavior, (f) means, comparison of means, standard deviations, and ranges of all variables, and (g) correlation matrix for all variables. The third section presents the results from the examination of the research questions. A summary of the results is provided at the end of this chapter.

Profile of Participants

This section describes the participants' demographic characteristics, including age and race. Table 5.1 shows the participants' demographic information on age and race. Most participants were in the ages of 14 and 15 (91%). The percentages of White and Black (or African American) were about the same (42% and 41%, respectively).

Preliminary Data Analyses

Preliminary data analyses of measured variables in the study are discussed in six sections. The first section, verification of outfit images, presents the results of the examination of whether participants' perceptions of the image of each of the four outfits was consistent with the image that each outfit was intended to represent. The second section,

Table 5.1. Profile of Participants

Characteristic		N	%
Age	13	3	1
	14	200	52
	15	150	39
	16	31	8
Race	White	161	42
	Black or African American	159	41
	Hispanic	18	5
	Asian or Pacific Islander	8	2
	American Indian	2	1
	Other	36	9

comparison of actual self and ideal self-concepts, employs paired t-tests to determine whether the two types of self-concepts were significantly different for each of the four different outfit images. The third section, calculation and comparison of the two types of clothing symbolism, reports each participant's score for the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) for each of the four outfit images. The fourth section, factor analysis of clothing involvement, and the fifth section, factor analysis of clothing behavior, reports the results of the examination of the constructs of the two variables that were measured by multiple items. The sixth section, means, comparison of means, standard deviations, and ranges of variables, reports the mean scores, standard deviations, and ranges of scores of all variables measured in the study and also shows the results of mean comparisons.

Verification of Outfit Images

To verify whether participants' perceptions of the image of each of the four outfits was consistent with the image that each outfit was intended to represent, Pillai's trace tests, one of the multivariate analyses of variance (MANOVA) in repeated measures, were conducted for each outfit image. Outfit 1 was selected to represent an outfit with a sexy image. The results for Outfit 1 showed that when participants were asked to use the four image descriptions (i.e., sexy, conservative, springy, sporty) to describe Outfit 1, the four image descriptions received significantly different ratings [$F(3, 380) = 429.52, p < .001$]

(see Table 5.2). The results for the Least Significant Difference (LSD) test showed that the mean for the description of sexy was significantly higher than the means for the other three image descriptions, indicating that participants perceived Outfit 1 to be the sexiest outfit, which is consistent with the image that Outfit 1 was intended to represent.

Table 5.2.   Comparisons of the Mean Scores and Standard Deviations for the Measures of Four Clothing Images

	Sexy		Conservative		Springy		Sporty		
Outfit	M	SD	M	SD	M	SD	M	SD	F
Outfit 1	4.26^a	1.02	2.82^b	1.23	2.46^c	1.26	1.60^d	1.02	429.52^*
Outfit 2	2.15^d	1.07	3.40^a	1.22	3.21^b	1.26	2.17^c	1.22	134.40^*
Outfit 3	1.52^d	.84	3.13^b	1.37	3.81^a	1.40	1.82^c	1.09	328.41^*
Outfit 4	3.11^c	1.30	3.33^b	1.34	2.44^d	1.23	3.83^a	1.40	95.69^*

Note. Means with different superscript letters (a, b, c, d) in the same row are significantly different at the .05 level.
$^*p < .001$.

Outfit 2 was selected to represent an outfit with a conservative image. The results for Outfit 2 showed that when participants were asked to use the four image descriptions (i.e., sexy, conservative, springy, sporty) to describe Outfit 2, the four image descriptions received significantly different ratings [$F(3, 380) = 134.40, p < .001$] (see Table 5.2). The results for the LSD test showed that the mean for the description of conservative was significantly higher than the means for the other three image descriptions, indicating that participants perceived Outfit 2 to be the most conservative outfit, which is consistent with the image that Outfit 2 was intended to represent.

Outfit 3 was selected to represent an outfit with a springy image. The results for Outfit 3 showed that when participants were asked to use the four image descriptions (i.e., sexy, conservative, springy, sporty) to describe Outfit 3, the four image descriptions received significantly different ratings [$F(3, 380) = 328.41, p < .001$] (see Table 5.2). The results for the LSD test showed that the mean of the description of springy was significantly higher than the means for the other three image descriptions, indicating that participants perceived Outfit

3 to be the springiest outfit, which is consistent with the image that Outfit 3 was intended to represent.

Outfit 4 was selected to represent an outfit with a sporty image. The results for Outfit 4 showed that when participants were asked to use the four image descriptions (i.e., sexy, conservative, springy, sporty) to describe Outfit 4, the four image descriptions received significantly different ratings [$F(3, 380) = 95.69, p < .001$] (see Table 5.2). The results for the LSD test showed that the mean of the description of sporty was significantly higher than the means for the other three image descriptions, indicating that participants perceived Outfit 4 to be the sportiest outfit, which is consistent with the image that Outfit 4 was intended to represent.

All results confirmed that participants' perceptions of the image of each of the four outfits were consistent with the image that each outfit was intended to represent.

Comparison of Actual Self and Ideal Self-Concepts

In the current study, participants' actual self-concepts and ideal self-concepts were measured. Paired *t*-tests were employed to determine whether the two types of self-concepts were significantly different for each of the four images. The results showed that, only for the sexy image, a statistically significant difference emerged between the mean for the actual self-concept scores ($M = 3.40$) and the mean for the ideal self-concept scores ($M = 4.01$) [$t(384) = -9.35, p < .001$], indicating that participants would like to be perceived as more sexy than they actually perceived themselves (see Table 5.3). For the other three images (i.e., conservative, springy, sporty), no significant differences were found.

Calculation and Comparison of the Two Types of Clothing Symbolism

In the current study, participants' actual self and ideal self-concepts and their perceptions of the image of each of the four outfits were measured. Based on these measures, for each participant with respect to each outfit image, two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) were determined using the following formulas.

Actual self and clothing image congruity

$= - |$ Actual self-concept – Perceived outfit image $|$

Ideal self and clothing image congruity

$= - |$ Ideal self-concept – Perceived outfit image $|$

The possible scores ranged from 0 to -4, with "0" indicating that the self-concept and perceived clothing image were congruent, and "-4" indicating the greatest degree of difference between the self-concept and perceived clothing image. With "0," a participant would perceive that her self-concept is exactly the same as the outfit image. With "-4," a participant would perceive that her self-concept is extremely different from the outfit image.

Table 5.3. Comparisons between Actual Self-Concepts and Ideal Self-Concepts

	Mean	*T*	*p*
Sexy Image		-9.35	$< .001$
Actual self-concept	3.40		
Ideal self-concept	4.01		
Conservative Image		.67	.506
Actual self-concept	3.29		
Ideal self-concept	3.26		
Springy Image		-1.77	.077
Actual self-concept	3.39		
Ideal self-concept	3.49		
Sporty Image		-1.49	.138
Actual self-concept	3.26		
Ideal self-concept	3.35		

Paired *t*-tests were employed to determine whether the two types of clothing symbolism were significantly different for each of the four outfit images. The results showed that only for the sexy outfit image, a significant difference emerged between the means for actual self and clothing image congruity scores ($M = -1.33$) and the means for ideal self and clothing image congruity scores ($M = -0.92$) [$t(384) = -6.82, p < .001$], indicating that the image of the sexy outfit was perceived as closer to participants' perceived ideal self-concepts

than their actual self-concepts (see Table 5.4). For the other three outfit images (i.e., conservative, springy, sporty), no significant differences were found.

Table 5.4. Comparisons between the Two Types of Clothing Symbolism

	Mean	t	p
Sexy Outfit Image		-6.82	< .001
Actual self and clothing image congruity	-1.33		
Ideal self and clothing image congruity	-0.92		
Conservative Outfit Image		-1.05	.294
Actual self and clothing image congruity	-1.40		
Ideal self and clothing image congruity	-1.33		
Springy Outfit Image		-1.60	.110
Actual self and clothing image congruity	-1.39		
Ideal self and clothing image congruity	-1.31		
Sporty Outfit Image		-0.05	.962
Actual self and clothing image congruity	-1.44		
Ideal self and clothing image congruity	-1.43		

Exploratory Factor Analysis for Clothing Involvement

In the current study, clothing involvement was measured with nine items. Exploratory factor analysis was conducted to examine whether these items contained different constructs. Eigenvalues greater than 1.0 and factor loadings of .50 or greater were the criteria for retaining items. Varimax rotation was used to obtain a clear pattern of loadings. The results revealed three factors. Four questions were in the first factor, two questions were in the second factor, and two questions were in the third factor. The items in the first factor were named clothing importance and contained four questions accounting for 23.81% of the variance in clothing involvement (see Table 5.5). The second factor was named clothing expressions and contained two items accounting for 16.47% of the variance in clothing involvement. The third factor was named clothing brand perceptions and contained two items accounting for 15.27% of the variance in clothing involvement. One item, "Clothing is appealing", was removed because factor loadings for this item were lower than the .50 criterion. However, because the coefficient alpha values for clothing expressions (.47) and

clothing brand perceptions (.50) were low, indicating low internal consistency, these two

factors were not included in the study.

Table 5.5. Factor Analysis for Clothing Involvement

Factor labels and statements	Factor loading	Eigenvalue	Percent of explained variance	Coefficient alpha
Clothing importance		2.41	23.81	.66
Clothing is important to me	.78			
Clothing is boring	.78			
Clothing doesn't matter to me	.68			
I like to read articles about clothing	.55			
Clothing expressions		1.48	16.47	.47
The clothing a person wears tells me about that person	.78			
The clothes I wear express who I am	.76			
Clothing brand perceptions		1.37	15.27	.50
There are big differences among the various brands of clothing	.83			
I prefer a specific brand of clothes	.77			

Exploratory Factor Analysis for Clothing Behavior

In the current study, clothing behavior for each of the four outfit images was

measured with three items. Factor analysis was used to assess validity, that is whether the

three items measured the same construct. Eigenvalues greater than 1.0 and factor loadings of

.50 or greater were the criteria for retaining items. The results showed that, for each of the

four outfit images, the three items consistently contained only one factor, indicating that the

three items measured the same construct (see Table 5.6). For each outfit image, the scores for

the three items were averaged to represent a participant's clothing behavior for each outfit

image.

Means, Comparison of Means, Standard Deviations, and Ranges of All Variables

Means, comparison of means, standard deviations, and score ranges of variables

included perceptions of reference groups' clothing behavior or opinions, measures related to

clothing symbolism, clothing involvement, clothing purchase intentions, and clothing

behavior. For perceptions of reference groups' clothing behavior or opinions, clothing symbolism (i.e., actual self-concept, ideal self-concept, and clothing image only), clothing involvement, clothing purchase intentions, and clothing behavior, the range of the

Table 5.6. Factor Analysis for Clothing Behavior

Factor labels and statements	Factor loading	Eigenvalue	Percent of explained variance	Coefficient alpha
Outfit 1 (Sexy Image)		2.41	80.24	.87
Outfit 1 is like what I usually wear when hanging out with friends.	.91			
How often do you wear clothes like Outfit 1 when hanging out with friends?	.91			
How similar is Outfit 1 to what you usually wear when hanging out with friends?	.87			
Outfit 2 (Conservative Image)		2.38	79.20	.87
Outfit 2 is like what I usually wear when hanging out with friends.	.90			
How often do you wear clothes like Outfit 2 when hanging out with friends?	.90			
How similar is Outfit 2 to what you usually wear when hanging out with friends?	.87			
Outfit 3 (Springy Image)		2.34	77.86	.86
Outfit 3 is like what I usually wear when hanging out with friends.	.91			
How often do you wear clothes like Outfit 3 when hanging out with friends?	.90			
How similar is Outfit 3 to what you usually wear when hanging out with friends?	.83			
Outfit 4 (Sporty Image)		2.60	86.67	.92
Outfit 4 is like what I usually wear when hanging out with friends.	.94			
How often do you wear clothes like Outfit 4 when hanging out with friends?	.93			
How similar is Outfit 4 to what you usually wear when hanging out with friends?	.92			

measurement scale was 1 through 5. For clothing symbolism (i.e., actual self and clothing image congruity and ideal self and clothing image congruity only), the range of the scale was -4 through 0.

Means, comparison of means, standard deviations, and score ranges of all variables, for each outfit image in the study, are shown in Table 5.7. Repeat measures MANOVA and the Bonferroni post hoc test were used to compare the group means.

Table 5.7.   Mean Scores, Comparison of Means, Standard Deviations, and Ranges for All Variables

	M	*SD*	Range	*F*
Perceptions of Reference Groups' Clothing Behavior or Opinions				
Friends' clothing behavior				329.76[*]
Sexy outfit image (Outfit 1)	3.66 [b]	1.36	1 – 5	
Conservative outfit image (Outfit 2)	2.27 [c]	1.22	1 – 5	
Springy outfit image (Outfit 3)	1.55 [d]	.96	1 – 5	
Sporty outfit image (Outfit 4)	4.07 [a]	1.27	1 – 5	
Popular girls' clothing behavior				236.19[*]
Sexy outfit image (Outfit 1)	4.04 [a]	1.33	1 – 5	
Conservative outfit image (Outfit 2)	2.45 [b]	1.35	1 – 5	
Springy outfit image (Outfit 3)	1.72 [c]	1.18	1 – 5	
Sporty outfit image (Outfit 4)	3.91 [a]	1.33	1 – 5	
Parents' opinions concerning clothing behavior				73.16[*]
Sexy outfit image (Outfit 1)	3.07 [b c]	1.41	1 – 5	
Conservative outfit image (Outfit 2)	3.29 [b]	1.45	1 – 5	
Springy outfit image (Outfit 3)	2.80 [c]	1.55	1 – 5	
Sporty outfit image (Outfit 4)	3.99 [a]	1.23	1 – 5	
Measures Related to Clothing Symbolism				
Self-concepts				
Actual self-concept				1.56
Sexy	3.40	1.23	1 – 5	
Conservative	3.29	1.12	1 – 5	
Springy	3.39	1.05	1 – 5	
Sporty	3.26	1.27	1 – 5	
Ideal self-concept				38.73[*]
Sexy	4.01 [a]	1.14	1 – 5	
Conservative	3.26 [c]	1.23	1 – 5	
Springy	3.49 [b]	1.11	1 – 5	
Sporty	3.35 [b c]	1.34	1 – 5	
Clothing image				48.44[*]
Sexy outfit image (Outfit 1)	4.26 [a]	1.02	1 – 5	
Conservative outfit image (Outfit 2)	3.40 [c]	1.14	1 – 5	
Springy outfit image (Outfit 3)	3.81 [b]	1.40	1 – 5	
Sporty outfit image (Outfit 4)	3.83 [b]	1.40	1 – 5	

Clothing Symbolism				
Actual self and clothing image congruity				.66
Sexy outfit image (Outfit 1)	-1.33	1.11	-4 – 0	
Conservative outfit image (Outfit 2)	-1.40	1.10	-4 – 0	
Springy outfit image (Outfit 3)	-1.39	1.10	-4 – 0	
Sporty outfit image (Outfit 4)	-1.44	1.20	-4 – 0	
Ideal self and clothing image congruity				19.76[*]
Sexy outfit image (Outfit 1)	-.92 [a]	1.02	-4 – 0	
Conservative outfit image (Outfit 2)	-1.33 [b]	1.10	-4 – 0	
Springy outfit image (Outfit 3)	-1.31 [b]	1.14	-4 – 0	
Sporty outfit image (Outfit 4)	-1.43 [b]	1.26	-4 – 0	
Clothing Involvement				
Clothing importance	4.06	.77	1 – 5	
Clothing expressions	Low internal consistency in the measure. The factor was not included in the study.			
Clothing brand perceptions	Low internal consistency in the measure. The factor was not included in the study.			
Clothing Purchase Intentions				322.11[*]
Sexy outfit image (Outfit 1)	3.27 [b]	1.47	1 – 5	
Conservative outfit image (Outfit 2)	2.03 [c]	1.21	1 – 5	
Springy outfit image (Outfit 3)	1.44 [d]	.88	1 – 5	
Sporty outfit image (Outfit 4)	3.95 [a]	1.42	1 – 5	
Clothing Behavior				376.94[*]
Sexy outfit image (Outfit 1)	2.74 [b]	1.17	1 – 5	
Conservative image outfit (Outfit 2)	1.94 [c]	.99	1 – 5	
Springy outfit image (Outfit 3)	1.41 [d]	.72	1 – 5	
Sporty outfit image (Outfit 4)	3.89 [a]	1.30	1 – 5	

[*] $p < .001$.

For the perceptions of reference groups' clothing behaviors or opinions, specifically for the perceptions of friends' clothing behavior with respect to the four different outfit images, the results of the repeat measures MANOVA showed that the mean scores for the four outfit images were significantly different [$F(3, 380) = 329.76, p < .001$] (see Table 5.7). The Bonferroni post hoc test results showed that the sporty outfit image had the highest mean, indicating that participants perceived that their friends were most likely to wear clothing similar to the sporty outfit when hanging out with friends. For the perceptions of popular girls' clothing behaviors with respect to the four different outfit images, the MANOVA results showed that the mean scores for the four outfit images were significantly different [$F(3, 380) = 236.19, p < .001$]. The Bonferroni post hoc test results showed that the sexy and sporty outfit images had significantly higher means than the conservative and

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springy outfit images, indicating that participants perceived that popular girls were more likely to wear clothing similar to the sexy and sporty outfit images than clothing similar to the conservative and springy outfits when hanging out with friends. For the perceptions of parents' opinions concerning clothing behaviors with respect to the four different outfit images, the MANOVA results showed that the mean scores for the four outfit images were significantly different [$F(3, 380) = 73.16, p < .001$]. The Bonferroni post hoc test results showed that the sporty outfit image had the highest mean, indicating that participants' perceived that their parents (or other adults in their households) would most like them to wear an outfit with a sporty image when hanging out with friends.

To calculate the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), three variables were measured (i.e., actual self-concept, ideal self-concept, clothing image of the four outfits). For self-concepts, the repeat measures MANOVA results showed that the mean scores were not significantly different for actual self-concept [$F(3, 380) = 1.56, p = .199$] (see Table 5.7), but were significantly different for ideal self-concept [$F(3, 380) = 38.73, p < .001$]. For ideal self-concept, the Bonferroni post hoc test results showed that sexy had the highest mean, indicating that among sexy, conservative, springy, and sporty, participants would most like to be perceived sexy (i.e., ideal self-concept). For clothing image among the four different outfit images (i.e., sexy, conservative, springy, sporty), the MANOVA results showed that the mean scores were significantly different [$F(3, 380) = 48.44, p < .001$]. The Bonferroni post hoc test results showed that the sexy outfit image (Outfit 1) had the highest mean, indicating that the sexy adjective most closely described the image of Outfit 1 in comparison to the other three adjectives examined in the study. For the two types of clothing symbolism, the MANOVA results showed that the mean scores were not significantly different for actual self and clothing image congruity [$F(3, 380) = .66, p = .579$], but were significantly different for ideal self and clothing image congruity [$F(3, 380) = 19.76, p < .001$]. For ideal self and clothing image congruity, the Bonferroni post hoc test results showed that among the four different outfit images, the sexy outfit image had the highest mean (i.e., closest to 0), indicating that participants perceived that the sexy outfit image was the most consistent with their ideal self-concepts.

For participants' clothing involvement, because of low internal consistency in the measures of the factors of clothing expressions and clothing brand perceptions, clothing expressions and clothing brand perceptions were not included in the study. Only the mean, standard deviation, and range of clothing importance were addressed in Table 5.7.

For participants' clothing purchase intentions and clothing behaviors with respect to the four outfit images, the repeat measures MANOVA results showed that the mean scores for clothing purchase intentions and for clothing behaviors were both significantly different among the four outfits ([$F(3, 380) = 322.11$, $p < .001$] and [$F(3, 380) = 376.94$, $p < .001$], respectively). For participants' clothing purchase intentions and clothing behaviors, the Bonferroni post hoc test results showed that the sporty outfit image had the highest mean, indicating that participants were most likely to purchase and wear an outfit with a sporty image for hanging out with friends.

Correlation Matrix for All Independent Variables

Correlations between the six independent variables in the study were examined to assess if a high level of association between the independent variables existed (i.e., multicollinearity) because multicollinearity can substantially affect the results of multiple regression analysis. Tsui, Ashford, St. Clair, and Xin (1995) suggest that correlation should not exceed .75. Results in tables 5.8 to 5.11 show no correlations between the six independent variables for each of the outfit images greater than .75, indicating that no high degree of multicollinearity existed, and thus, all six variables were included in the analysis performed to address the Research Questions.

Table 5.8. Correlation Matrix of the Independent Variables: Sexy Outfit Image

	Friends' clothing behavior	Popular girls' clothing behavior	Parents' opinions concerning clothing behavior	Actual self and clothing image congruity	Ideal self and clothing image congruity	Clothing Importance
Friends' clothing behavior	-					
Popular girls' clothing behavior	.52	-				
Parents' opinions concerning clothing behavior	.26	.22	-			
Actual self and clothing image congruity	.11	.10	.12	-		
Ideal self and clothing image congruity	.16	.17	.11	.39	-	
Clothing importance	.10	.02	.20	.16	.08	-

Table 5.9. Correlation Matrix of the Independent Variables: Conservative Outfit Image

	Friends' clothing behavior	Popular girls' clothing behavior	Parents' opinions concerning clothing behavior	Actual self and clothing image congruity	Ideal self and clothing image congruity	Clothing Importance
Friends' clothing behavior	-					
Popular girls' clothing behavior	.59	-				
Parents' opinions concerning clothing behavior	.39	.36	-			
Actual self and clothing image congruity	.07	.06	-.07	-		
Ideal self and clothing image congruity	.08	.12	.05	.24	-	
Clothing importance	.02	-.10	.07	-.13	-.07	-

Table 5.10. Correlation Matrix of the Independent Variables: Springy Outfit Image

	Friends' clothing behavior	Popular girls' clothing behavior	Parents' opinions concerning clothing behavior	Actual self and clothing image congruity	Ideal self and clothing image congruity	Clothing importance
Friends' clothing behavior	-					
Popular girls' clothing behavior	.42	-				
Parents' opinions concerning clothing behavior	.28	.25	-			
Actual self and clothing image congruity	.14	.04	.00	-		
Ideal self and clothing image congruity	.09	.06	.06	.61	-	
Clothing importance	-.02	-.14	.00	.12	.15	-

Table 5.11. Correlation Matrix of the Independent Variables: Sporty Outfit Image

	Friends' clothing behavior	Popular girls' clothing behavior	Parents' opinions concerning clothing behavior	Actual self and clothing image congruity	Ideal self and clothing image congruity	Clothing importance
Friends' clothing behavior	-					
Popular girls' clothing behavior	.64	-				
Parents' opinions concerning clothing behavior	.44	.39	-			
Actual self and clothing image congruity	.08	.02	.07	-		
Ideal self and clothing image congruity	.05	.03	.03	.62	-	
Clothing importance	.12	.14	.13	.00	.04	-

Results of Statistical Analysis to Address the Research Questions

In Chapter IV, 16 Research Questions were formulated to examine three possible influences on adolescents' clothing behaviors: reference groups, clothing symbolism, and clothing involvement. For Research Questions 1, 3, 5, 7, 13, and 15 standard, or called enter selection, multiple regression analysis was used because the standard multiple regression analysis helps to answer the research questions pertaining to which independent variables have significant relationships with the dependent variable. For Research Questions 2, 4, 6, 8, 14, and 16, stepwise multiple regression analysis was used because such analysis helps to answer the research questions pertaining to which variable is most statistically predictive and which variables after that are statistically predictive. Research Questions 9 and 11 examined the relationships between clothing involvement and clothing purchase intentions and between clothing involvement and clothing behavior. The factor analysis revealed three factors of clothing involvement; however, because the coefficient alpha values for the factors of clothing expressions and clothing brand perceptions were low, these two factors were not included in the analysis performed to address the Research Questions. Only one factor, clothing importance, was used in the analysis for Research Questions 9 and 11, and correlation analysis was applied to measure the strength of the relationship between two variables. Research Questions 10 and 12 examined which of the factors of clothing involvement best predicts girls' clothing purchase intentions and clothing behavior. Since only one factor was analyzed for clothing involvement, the analyses for these two research questions were omitted. To address each of the Research Questions 13-16, the relationship between all independent variables and each dependent variable, for each of the four outfit images was examined. The current study includes six independent variables, including three types of perceptions of reference groups' clothing behavior or opinions (i.e., friends, popular girls, parents), two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), and one factor of clothing involvement (i.e., clothing importance). The dependent variables are clothing purchase intentions and clothing behavior.

The questionnaire in this study was based on the images of four different outfits (i.e., sexy, conservative, springy, sporty). Results were expected to differ among the four different

outfit images. Therefore, for each of the following research questions, the results for the four outfit images are reported separately.

Perceptions of Reference Groups' Clothing Behavior or Opinions and Clothing Purchase Intentions (Research Question 1)

This section presents the results for Research Question 1. Research Questions 1 was stated as below:

Research Question 1

For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) significantly related to girls' clothing purchase intentions?

Sexy Outfit for Research Question 1

A standard multiple regression analysis was conducted to address Research Question 1. The coefficient of multiple correlation (R) was .62 and the square of the correlation coefficient (R^2) was .38 for the equation, indicating that 38% of the variance in clothing purchase intentions for the sexy outfit was explained by the equation (see Table 5.12). The significant F value indicated that the equation was significant in explaining girls' clothing purchase intentions for the sexy outfit [$F(3, 380) = 77.28$, $p < .001$]. The t-values showed that all three perceptions of reference groups' clothing behavior or opinions significantly contributed to the prediction of girls' clothing purchase intentions for the sexy outfit. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .43$) contributed the most in explaining girls' clothing purchase intentions for the sexy outfit, followed by the perceptions of parents' opinions concerning clothing behavior ($\beta = .24$) and then the perceptions of popular girls' clothing behavior ($\beta = .13$).

Table 5.12. Prediction of Girls' Clothing Purchase Intentions by the Perceptions of Reference Groups' Clothing Behavior or Opinions: Standard Multiple Regression (Research Question 1)

	B	β	t
Sexy Outfit Image (R^2= .38)			
Constant	.25		
Friends' clothing behavior	.46	.43	8.88***
Popular girls' clothing behavior	.15	.13	2.76**
Parents' opinions concerning clothing behavior	.25	.24	5.62***
Conservative Outfit Image (R^2= .53)			
Constant	.11		
Friends' clothing behavior	.49	.50	11.04***
Popular girls' clothing behavior	.24	.27	6.02**
Parents' opinions concerning clothing behavior	.07	.08	2.05*
Springy Outfit Image (R^2= .38)			
Constant	.38		
Friends' clothing behavior	.36	.40	8.77***
Popular girls' clothing behavior	.23	.31	6.87***
Parents' opinions concerning clothing behavior	.04	.06	1.52
Sporty Outfit Image (R^2= .60)			
Constant	.05		
Friends' clothing behavior	.68	.61	13.78***
Popular girls' clothing behavior	.16	.15	3.51**
Parents' opinions concerning clothing behavior	.13	.11	2.98**

*$p < .05$, **$p, .01$, ***$p < .001$.

Conservative Outfit for Research Question 1

A standard multiple regression analysis was performed to address Research Question 1. The coefficient of multiple correlation (R) was .72 and the square of the correlation coefficient (R^2) for the equation was .53, indicating that 53% of the variance in clothing purchase intentions for the conservative outfit was explained by the equation (see Table 5.12). The significant F value indicated that the equation was significant in explaining girls' clothing purchase intentions for the conservative outfit [$F(3, 380) = 139.89, p < .001$]. The t-values showed that all three perceptions of reference groups' clothing behavior or opinions significantly contributed to the prediction of girls' clothing purchase intentions for the conservative outfit. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .50$) contributed the most in explaining girls' clothing purchase intentions for the conservative outfit, followed by the perceptions of popular girls'

clothing behavior (β = .27) and then the perceptions of parents' opinions concerning clothing behavior (β = .08).

Springy Outfit for Research Question 1

A standard multiple regression analysis was performed to examine Research Question 1. The coefficient of multiple correlation (R) for this equation was .62 and the square of the correlation coefficient (R^2) was .38, indicating that 38% of the variance in clothing purchase intentions for the springy outfit was explained by this equation (see Table 5.12). The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions for the springy outfit [$F(3, 380) = 78.57, p < .001$]. The t-values showed that only the perceptions of friends' clothing behavior and popular girls' clothing behavior significantly contributed to the prediction of girls' clothing purchase intentions for the springy outfit; the perception of parents' opinions concerning clothing behavior was not significantly at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior (β = .40) contributed the most in explaining girls' clothing purchase intentions for the springy outfit, followed by the perceptions of popular girls' clothing behavior (β = .31) and then the perceptions of parents' opinions concerning clothing behavior (β = .06).

Sporty Outfit for Research Question 1

A standard multiple regression analysis was performed to address Research Question 1. The coefficient of multiple correlation (R) for the equation was .77 and the square of the correlation coefficient (R^2) was .60, indicating that 60% of the variance in clothing purchase intentions for the sporty outfit was explained by the equation (see Table 5.12). The significant F value indicated that the equation was significant in explaining girls' clothing purchase intentions for the sporty outfit [$F(3, 380) = 185.91, p < .001$]. The t-values showed that all three perceptions of reference groups' clothing behavior or opinions significantly contributed to the prediction of girls' clothing purchase intentions for the sporty outfit. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior (β = .61) contributed the most in explaining girls' clothing purchase intentions for

the sporty outfit, followed by the perceptions of popular girls' clothing behavior ($\beta = .15$) and then the perceptions of parents' opinions concerning clothing behavior ($\beta = .11$).

Based on the results of the standard multiple regression analysis for Research Question 1, for the outfit images of sexy, conservative, and sporty, all three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) were significantly related to adolescent girls' clothing purchase intentions. For the springy outfit image, only the perceptions of friends' clothing behavior and popular girls' clothing behavior were significantly related to adolescent girls' clothing purchase intentions.

Perceptions of Reference Groups' Clothing Behavior or Opinions and Clothing Purchase Intentions (Research Question 2)

This section presents the results for Research Question 2. Research Question 2 was stated as below:

Research Question 2

For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) best predicts girls' clothing purchase intentions?

Sexy Outfit for Research Question 2

A stepwise multiple regression analysis was performed to address Research Question 2. All three perceptions of reference groups' clothing behavior or opinions were significant in each equation (see Table 5.13). In addition, the coefficient of multiple correlation (R) was .62 and the square of the correlation coefficient (R^2) was .38 for the equation, indicating that 38% of the variance in clothing purchase intentions for the sexy outfit was explained by the equation. The significant F value indicated that the equation was significant in explaining girls' clothing purchase intentions for the sexy outfit [$F(3, 380) = 77.28, p < .001$]. The t-values showed that all three perceptions of reference groups' clothing behavior or opinions significantly contributed to the prediction of girls' clothing purchase intentions for the sexy

outfit. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .43$) contributed the most in explaining girls' clothing purchase intentions for the sexy outfit, followed by the perceptions of parents' opinions concerning clothing behavior ($\beta = .24$) and then the perceptions of popular girls' clothing behavior ($\beta = .13$).

Table 5.13. Prediction of Girls' Clothing Purchase Intentions by the Perceptions of Reference Groups' Clothing Behavior or Opinions: Stepwise Multiple Regression (Research Question 2)

Step and predictor variable	R^2	ΔR^2	B	β	t
Sexy Outfit Image					
Step 1	.31	.31			
Constant			1.07		
Friends' clothing behavior			.60	.56	13.07***
Step 2	.37	.06			
Constant			.54		
Friends' clothing behavior			.53	.49	11.60***
Parents' opinions concerning clothing behavior			.26	.25	5.88***
Step 3	.38	.01			
Constant			.25		
Friends' clothing behavior			.46	.43	8.88***
Popular girls' clothing behavior			.15	.13	2.76**
Parents' opinions concerning clothing behavior			.25	.24	5.62***
Conservative Outfit Image					
Step 1	.47	.47			
Constant			.50		
Friends' clothing behavior			.67	.68	18.28***
Step 2	.52	.05			
Constant			.25		
Friends' clothing behavior			.51	.52	11.79***
Popular girls' clothing behavior			.25	.28	6.47***
Step 3	.53	.01			
Constant			.11		
Friends' clothing behavior			.49	.50	11.04***
Popular girls' clothing behavior			.24	.27	6.02***
Parents' opinions concerning clothing behavior			.07	.08	2.05*

	R	R^2	B	β	t
Springy Outfit Image					
Step 1	.30	.30			
Constant			.67		
Friends' clothing behavior			.50	.54	12.66***
Step 2	.38	.08			
Constant			.45		
Friends' clothing behavior			.38	.41	9.25***
Popular girls' clothing behavior			.24	.32	7.17***
Parents' opinions concerning clothing behavior	Did not enter the equation.				
Sporty Outfit Image					
Step 1	.57	.57			
Constant			.52		
Friends' clothing behavior			.84	.75	22.41***
Step 2	.59	.02			
Constant			.31		
Friends' clothing behavior			.72	.64	17.96***
Popular girls' clothing behavior			.18	.17	4.00***
Step 3	.60	.01			
Constant			.05		
Friends' clothing behavior			.68	.61	13.78***
Popular girls' clothing behavior			.16	.15	3.51**
Parents' opinions concerning clothing behavior			.13	.11	2.98**

*$p < .05$, **p, .01, ***$p < .001$.

Conservative Outfit for Research Question 2

A stepwise multiple regression analysis was performed to address Research Question 2. The results of the two regression analyses were identical in that all three perceptions of reference groups' clothing behavior or opinions significant in each equation (see Table 5.13). The coefficient of multiple correlation (R) was .72 and the square of the correlation coefficient (R^2) for the equation was .53, indicating that 53% of the variance in clothing purchase intentions for the conservative outfit was explained by the equation. The significant F value indicated that the equation was significant in explaining girls' clothing purchase intentions for the conservative outfit [$F(3, 380) = 139.89, p < .001$]. The t-values showed that all three perceptions of reference groups' clothing behavior or opinions significantly contributed to the prediction of girls' clothing purchase intentions for the conservative outfit. The standardized regression coefficients (β) showed that the perceptions of friends' clothing

behavior ($\beta = .50$) contributed the most in explaining girls' clothing purchase intentions for the conservative outfit, followed by the perceptions of popular girls' clothing behavior ($\beta = .27$) and then the perceptions of parents' opinions concerning clothing behavior ($\beta = .08$).

<u>Springy Outfit for Research Question 2</u>

A stepwise multiple regression analysis was performed to address Research Question 2. The results of the stepwise multiple regression analysis showed that only the perceptions of friends' clothing behavior and the perceptions of popular girls' clothing behavior entered the equation (see Table 5.13). The coefficient of multiple correlation (R) for this equation was .62 and the square of the correlation coefficient (R^2) was .38, indicating that 38% of the variance in clothing purchase intentions for the springy outfit was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions for the springy outfit [$F(2, 381) = 116.31$, $p < .001$]. The t-values showed that only the perceptions of friends' clothing behavior and popular girls' clothing behavior significantly contributed to the prediction of girls' clothing purchase intentions for the springy outfit image; the perception of parents' opinions concerning clothing behavior was not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .41$) contributed the most in explaining girls' clothing purchase intentions for the springy outfit image, followed by the perceptions of popular girls' clothing behavior ($\beta = .32$).

<u>Sporty Outfit for Research Question 2</u>

A stepwise multiple regression analysis was performed to address Research Question 2. All three perceptions of reference groups' clothing behavior or opinions were significant in the equation (see Table 5.13). The coefficient of multiple correlation (R) for the equation was .77 and the square of the correlation coefficient (R^2) was .60, indicating that 60% of the variance in clothing purchase intentions for the sporty outfit was explained by each equation. The significant F value indicated that the equation was significant in explaining girls' clothing purchase intentions for the sporty outfit [$F(3, 380) = 185.91$, $p < .001$]. The t-values showed that all three perceptions of reference groups' clothing behavior or opinions significantly contributed to the prediction of girls' clothing purchase intentions for the sporty

outfit. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .61$) contributed the most in explaining girls' clothing purchase intentions for the sporty outfit, followed by the perceptions of popular girls' clothing behavior ($\beta = .15$) and then the perceptions of parents' opinions concerning clothing behavior ($\beta = .11$).

Based on the results of the stepwise multiple regression analysis for Research Question 2, for the outfit images of sexy, conservative, and sporty, the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) best predicted adolescent girls' clothing purchase intentions. For the springy outfit image, only the perceptions of friends' clothing behavior and popular girls' clothing behavior best predicted adolescent girls' clothing purchase intentions.

Perception of Reference Groups' Clothing Behavior or Opinions and Clothing Behavior (Research Question 3)

This section presents the results for Research Question 3. Research Question 3 was stated as below:

Research Question 3

For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) significantly related to girls' clothing behavior?

Sexy Outfit for Research Question 3

A standard multiple regression analysis was performed to address Research Question 3. The coefficient of multiple correlation (R) for this equation was .51 and the square of the correlation coefficient (R^2) was .26, indicating that 26% of the variance in clothing behavior for the outfit with a sexy image was explained by this equation (see Table 5.14). The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the outfit with a sexy image [$F(3, 380) = 44.03$, $p < .001$]. The t-values showed

that only the perceptions of friends' clothing behavior and parents' opinions concerning clothing behavior significantly contributed to the prediction of girls' clothing behavior for the outfit with a sexy image; the perception of popular girls' clothing behavior was not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .35$) contributed the most in explaining girls' clothing behavior for the outfit with a sexy image, followed by the perceptions of parents' opinions concerning clothing behavior ($\beta = .23$) and then the perceptions of popular girls' clothing behavior ($\beta = .07$).

Table 5.14. Prediction of Girls' Clothing Behavior by the Perceptions of Reference Groups' Clothing Behavior or Opinions: Standard Multiple Regression (Research Question 3)

	B	β	t
Sexy Outfit Image ($R^2 = .26$)			
Constant	.79		
Friends' clothing behavior	.30	.35	6.73***
Popular girls' clothing behavior	.06	.07	1.39
Parents' opinions concerning clothing behavior	.19	.23	4.95***
Conservative Outfit Image ($R^2 = .45$)			
Constant	.43		
Friends' clothing behavior	.40	.49	10.19***
Popular girls' clothing behavior	.12	.16	3.37**
Parents' opinions concerning clothing behavior	.10	.15	3.51**
Springy Outfit Image ($R^2 = .35$)			
Constant	.57		
Friends' clothing behavior	.32	.43	9.33***
Popular girls' clothing behavior	.12	.20	4.37***
Parents' opinions concerning clothing behavior	.05	.10	2.36*
Sporty Outfit Image ($R^2 = .56$)			
Constant	.38		
Friends' clothing behavior	.62	.60	13.06***
Popular girls' clothing behavior	.13	.13	2.89**
Parents' opinions concerning clothing behavior	.13	.12	3.13**

*$p < .05$, **p, .01, ***$p < .001$.

Conservative Outfit for Research Question 3

A standard multiple regression analysis was performed to address Research Question 3. The coefficient of multiple correlation (R) for each equation was .67 and the square of the correlation coefficient (R^2) was .45, indicating that 45% of the variance in clothing behavior

for the outfit with a conservative image was explained by the equation (see Table 5.14). The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the outfit with a conservative image [$F(3, 380) = 104.85$, $p < .001$]. The t-values showed that all three perceptions of reference groups' clothing behavior or opinions significantly contributed to the prediction of girls' clothing behavior for the outfit with a conservative image. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .49$) contributed the most in explaining girls' clothing behavior for the outfit with a conservative image, followed by the perceptions of parents' opinions concerning clothing behavior ($\beta = .16$) and then the perceptions of popular girls' clothing behavior ($\beta = .15$).

Springy Outfit for Research Question 3

A standard multiple regression analysis was performed to address Research Question 3. The coefficient of multiple correlation (R) for this equation was .59 and the square of the correlation coefficient (R^2) was .35, indicating that 35% of the variance in clothing behavior for the outfit with a springy image was explained by the equation (See Table 5.14). The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the outfit with a springy image [$F(3, 380) = 67.61$, $p < .001$]. The t-values showed that all three perceptions of reference groups' clothing behavior or opinions significantly contributed to the prediction of girls' clothing behavior for the outfit with a springy image. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .43$) contributed the most in explaining girls' clothing behavior for the outfit with a springy image, followed by the perceptions of popular girls' clothing behavior ($\beta = .20$) and then the perceptions of parents' opinions concerning clothing behavior ($\beta = .10$).

Sporty Outfit for Research Question 3

A standard multiple regression analysis performed to address examine Research Question 3. The coefficient of multiple correlation (R) for the equation was .75 and the square of the correlation coefficient (R^2) was .56, indicating that 56% of the variance in clothing behavior for the outfit with a sporty image was explained by this equation (See

Table 5.14). The significant *F* value indicated that this equation was significant in explaining girls' clothing behavior for the outfit with a sporty image [$F(3, 380) = 163.59, p < .001$]. The *t*-values showed that all three perceptions of reference groups' clothing behavior or opinions significantly contributed to the prediction of girls' clothing behavior for the outfit with a sporty image. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .60$) contributed the most in explaining girls' clothing behavior for the outfit with a sporty image, followed by the perceptions of popular girls' clothing behavior ($\beta = .13$) and then the perceptions of parents' opinions concerning clothing behavior ($\beta = .12$).

Based on the results of the standard multiple regression analysis for Research Question 3, for the outfit images of conservative, springy, and sporty, all three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) were significantly related to adolescent girls' clothing behavior. For the sexy outfit image, only the perceptions of friends' clothing behavior and parents' opinions concerning clothing behavior were significantly related to adolescent girls' clothing behavior.

Perception of Reference Groups' Clothing Behavior or Opinions and Clothing Behavior (Research Question 4)

This section presents the results for Research Question 4. Research Question 4 was stated as below:

Research Question 4

For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) best predicts girls' clothing behavior?

Sexy Outfit for Research Question 4

A stepwise multiple regression analysis was performed to address Research Question 4. The results of the stepwise multiple regression analysis showed that only the perceptions

of friends' clothing behavior and parents' opinions concerning clothing behavior entered the equation (see Table 5.15). The coefficient of multiple correlation (R) for this equation was .50 and the square of the correlation coefficient (R^2) was .25, indicating that 25% of the variance in clothing behavior for the outfit with a sexy image was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the outfit with a sexy image [$F(2, 381) = 64.91$, $p < .001$]. The t-values showed that only the perceptions of friends' clothing behavior and parents' opinions concerning clothing behavior significantly contributed to the predication of girls' clothing behavior for the outfit with a sexy image; the perception of popular girls' clothing behavior was not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .39$) contributed the most in explaining girls' clothing behavior for the outfit with a sexy image, followed by the perceptions of parents' opinions concerning clothing behavior ($\beta = .23$).

Table 5.15.   Prediction of Girls' Clothing Behavior by the Perceptions of Reference Groups' Clothing Behavior or Opinions: Stepwise Multiple Regression (Research Question 4)

	R^2	ΔR^2	B	β	t
Sexy Outfit Image					
Step 1	.20	.20			
Constant			1.32		
Friends' clothing behavior			.39	.45	9.87***
Step 2	.25	.05			
Constant			.92		
Friends' clothing behavior			.33	.39	8.47***
Parents' opinions concerning clothing behavior			.19	.23	5.11***
Popular girls' clothing behavior	Did not enter the equation.				
Conservative Outfit Image					
Step 1	.41	.41			
Constant			.77		
Friends' clothing behavior			.52	.64	4.13***
Step 2	.44	.03			
Constant			.50		
Friends' clothing behavior			.46	.58	13.79***
Parents' opinions concerning clothing behavior			.12	.17	4.13***
Step 3	.45	.02			
Friends' clothing behavior			.40	.49	10.19***
Popular girls' clothing behavior			.12	.16	3.37**
Parents' opinions concerning clothing behavior			.10	.15	3.51**

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	R^2	R^2 change	B	β	t
Springy Outfit Image					
Step 1	.30	.30			
Constant			.78		
Friends' clothing behavior			.41	.55	12.77***
Step 2	.34	.04			
Constant			.66		
Friends' clothing behavior			.34	.46	9.95***
Popular girls' clothing behavior			.13	.22	4.76***
Step 3	.35	.01			
Constant			.57		
Friends' clothing behavior			.32	.43	9.33***
Popular girls' clothing behavior			.12	.20	4.37***
Parents' opinions concerning clothing behavior			.05	.10	2.36*
Sporty Outfit Image					
Step 1	.54	.54			
Constant			.82		
Friends' clothing behavior			.76	.73	21.12***
Step 2	.55	.02			
Constant			.49		
Friends' clothing behavior			.69	.67	17.70***
Parents' opinions concerning clothing behavior			.15	.14	3.61***
Step 3	.56	.01			
Constant			.38		
Friends' clothing behavior			.62	.60	13.06***
Popular girls' clothing behavior			.13	.13	2.89*
Parents' opinions concerning clothing behavior			.13	.12	3.13*

*$p < .05$, **$p, .01$, ***$p < .001$.

Conservative Outfit for Research Question 4

A stepwise multiple regression analysis was performed to address Research Question 4. All three perceptions of reference groups' clothing behavior or opinions were significant in the equation (see Table 5.15). The coefficient of multiple correlation (R) for each equation was .67 and the square of the correlation coefficient (R^2) was .45, indicating that 45% of the variance in clothing behavior for the outfit with a conservative image was explained by the equation. The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the outfit with a conservative image [$F(3, 380) = 104.85$, $p < .001$]. The t-values showed that all three perceptions of reference groups' clothing behavior or opinions significantly contributed to the prediction of girls' clothing behavior for the outfit with a conservative image. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .49$) contributed the most in explaining girls'

clothing behavior for the outfit with a conservative image, followed by the perceptions of parents' opinions concerning clothing behavior ($\beta = .16$) and then the perceptions of popular girls' clothing behavior ($\beta = .15$).

Springy Outfit for Research Question 4

A stepwise multiple regression analysis was performed to address Research Question 4. All three perceptions of reference groups' clothing behavior or opinions were significant in each equation (see Table 5.15). The coefficient of multiple correlation (R) for the equation was .59 and the square of the correlation coefficient (R^2) was .35, indicating that 35% of the variance in clothing behavior for the outfit with a springy image was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the outfit with a springy image [$F(3, 380) = 67.61, p < .001$]. The t-values showed that all three perceptions of reference groups' clothing behavior or opinions significantly contributed to the prediction of girls' clothing behavior for the outfit with a springy image. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .43$) contributed the most in explaining girls' clothing behavior for the outfit with a springy image, followed by the perceptions of popular girls' clothing behavior ($\beta = .20$) and then the perceptions of parents' opinions concerning clothing behavior ($\beta = .10$).

Sporty Outfit for Research Question 4

A stepwise multiple regression analysis performed to address Research Question 4. The results of the two regression analyses were identical in that all three perceptions of reference groups' clothing behavior or opinions were significant in each equation (see Table 5.15). The coefficient of multiple correlation (R) for the equation was .75 and the square of the correlation coefficient (R^2) was .56, indicating that 56% of the variance in clothing behavior for the outfit with a sporty image was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the outfit with a sporty image [$F(3, 380) = 163.59, p < .001$]. The t-values showed that all three perceptions of reference groups' clothing behavior or opinions significantly contributed to the prediction of girls' clothing behavior for the outfit with a sporty image. The

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standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .60$) contributed the most in explaining girls' clothing behavior for the outfit with a sporty image, followed by the perceptions of popular girls' clothing behavior ($\beta = .13$) and then the perceptions of parents' opinions concerning clothing behavior ($\beta = .12$).

Based on the results of the stepwise multiple regression analysis for Research Question 4, for the outfit images of conservative, springy, and sporty, the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) best predicted adolescent girls' clothing behavior. For the sexy outfit image, only the perceptions of friends' clothing behavior and parents' opinions concerning clothing behavior were the best predictors for adolescent girls' clothing behavior.

Clothing Symbolism and Clothing Purchase Intentions (Research Questions 5)

This section presents the results of Research Question 5. Research Question 5 was stated as below:

Research Question 5

For each of the four different outfit images, are the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) significantly related to girls' clothing purchase intentions?

Sexy Outfit for Research Question 5

A standard multiple regression analysis was performed to address Research Question 5. The coefficient of multiple correlation (R) for this equation was .24 and the square of the correlation coefficient (R^2) was .06, indicating that 6% of the variance in clothing purchase intentions for the sexy outfit was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions for the sexy outfit [$F(2, 381) = 12.02, p < .001$]. The t-values showed that only ideal self and clothing image congruity significantly contributed to the prediction of girls' clothing purchase intentions for the sexy outfit; actual self and clothing image congruity was not significant at the .05 level (see Table 5.16).

Table 5.16. Prediction of Girls' Clothing Purchase Intentions by Clothing Symbolism: Standard Multiple Regression (Research Question 5)

	b	β	t
Sexy Outfit Image (R^2 = .06)			
Constant	3.69		
Actual self and clothing image congruity	.12	.09	1.67
Ideal self and clothing image congruity	.28	.19	3.58**
Conservative Outfit Image (R^2 = .02)			
Constant	2.27		
Actual self and clothing image congruity	.08	.07	1.30
Ideal self and clothing image congruity	.10	.09	1.77
Springy Outfit Image (R^2 = .02)			
Constant	1.60		
Actual self and clothing image congruity	.07	.09	1.36
Ideal self and clothing image congruity	.05	.06	.90
Sporty Outfit Image (R^2 = .01)			
Constant	4.10		
Actual self and clothing image congruity	.07	.06	.93
Ideal self and clothing image congruity	.04	.03	.48

*$p < .05$, **$p < .001$.

Conservative Outfit for Research Question 5

A standard multiple regression analysis was performed to address Research Question 5. The coefficient of multiple correlation (R) for this equation was .13 and the square of the correlation coefficient (R^2) was .02, indicating that 2% of the variance in clothing purchase intentions for the conservative outfit was explained by this equation (see Table 5.16). However, the *t*-values showed that both actual self and clothing image congruity and ideal self and clothing image congruity did not significantly contribute to the prediction of girls' clothing purchase intentions for the conservative outfit.

Springy Outfit for Research Question 5

A standard multiple regression analysis was performed to address Research Question 5 for the springy outfit. The coefficient of multiple correlation (R) for this equation was .13 and the square of the correlation coefficient (R^2) was .02, indicating that 2% of the variance in clothing purchase intentions for the springy outfit was explained by this equation (see Table 5.16). However, the *t*-values showed that both actual self and clothing image congruity

and ideal self and clothing image congruity did not significantly contribute to the prediction of girls' clothing purchase intentions for the springy outfit.

Sporty Outfit for Research Question 5

The coefficient of multiple correlation (R) for this equation was .08 and the square of the correlation coefficient (R^2) was .01, indicating that 1% of the variance in clothing purchase intentions for the sporty outfit was explained by this equation (see Table 5.16). The non-significant F value indicated that this equation was not significant in explaining girls' clothing purchase intentions for the sporty outfit [$F(2, 381) = 1.33, p = .267$]. The t-values showed that actual self and clothing image congruity and ideal self and clothing image congruity were not significant at the 0.05 level.

Based on the results of the standard multiple regression analysis for Research Question 5, for the outfit image of sexy, one type of clothing symbolism (i.e., ideal self and clothing image congruity) was significantly related to adolescent girls' clothing purchase intentions. For the outfit images of conservative, springy, and sporty, both types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) were not significantly related to adolescent girls' clothing purchase intentions.

Clothing Symbolism and Clothing Purchase Intentions (Research Question 6)

This section presents the results of Research Question 6. Research Question 6 was stated as below:

Research Question 6

For each of the four different outfit images, which of the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) best predicts girls' clothing purchase intentions?

Sexy Outfit for Research Question 6

A stepwise multiple regression analysis was performed to address Research Question 6. The results of the stepwise multiple regression analysis showed that only ideal self and clothing image congruity entered the equation (see Table 5.17). The coefficient of multiple

correlation (R) for this equation was .23 and the square of the correlation coefficient (R^2) was .05, indicating that 5% of the variance in clothing purchase intentions for the sexy outfit was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions for the sexy outfit [$F(1, 382) = 21.17, p < .001$]. The t-values showed that ideal self and clothing image congruity significantly contributed to the prediction of girls' clothing purchase intentions for the sexy outfit; actual self and clothing image congruity was not significant at the .05 level.

Table 5.17. Prediction of Girls' Clothing Purchase Intentions by Clothing Symbolism: Stepwise Multiple Regression (Research Question 6)

Step and predictor variable	R^2	ΔR^2	b	β	t
Sexy Outfit Image					
Step 1	.05	.05			
Constant			2.19		
Ideal self and clothing image congruity			.12	.11	2.14[*]
Actual self and clothing image congruity	Did not enter the equation				
Conservative Outfit Image					
Step 1	.01	.01			
Constant			2.19		
Ideal self and clothing image congruity			.12	.11	2.14[*]
Actual self and clothing image congruity	Did not enter the equation				
Springy Outfit Image					
Step 1	.02	.02			
Constant			1.58		
Actual self and clothing image congruity			.10	.12	2.41[*]
Ideal self and clothing image congruity	Did not enter the equation				
Sporty Outfit Image	No variables entered the equation.				

[*]$p < .05$

Conservative Outfit for Research Question 6

  A stepwise multiple regression analysis was performed to address Research Question 6. Only ideal self and clothing image congruity entered the equation (see Table 5.17). The coefficient of multiple correlation (R) for this equation was .11 and the square of the correlation coefficient (R^2) was .01, indicating that 1% of the variance in clothing purchase intentions for the conservative outfit was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions

for the conservative outfit [$F(1, 382) = 4.58, p < .05$]. The *t*-values showed that ideal self and clothing image congruity significantly contributed to the prediction of girls' clothing purchase intentions for the conservative outfit; actual self and clothing image congruity was not significant at the .05 level.

Springy Outfit for Research Question 6

A stepwise multiple regression analysis was performed to address Research Question 6 for the springy outfit. Only actual self and clothing image congruity entered the equation (see Table 5.17). The coefficient of multiple correlation (*R*) for this equation was .12 and the square of the correlation coefficient (R^2) was .02, indicating that 2% of the variance in clothing purchase intentions for the springy outfit was explained by this equation. The significant *F* value indicated that this equation was significant in explaining girls' clothing purchase intentions for the springy outfit [$F(1, 382) = 4.47, p < .05$]. The *t*-values showed that actual self and clothing image congruity significantly contributed to the prediction of girls' clothing purchase intentions for the springy outfit; ideal self and clothing image congruity was not significant at the .05 level.

Sporty Outfit for Research Question 6

The results of the stepwise multiple regression analysis showed that both actual self and clothing image congruity and ideal self and clothing image congruity did not enter the equation for the sporty outfit image.

Based on the results of the stepwise multiple regression analysis for Research Question 6, for the outfit images of sexy and conservative, only one type of clothing symbolism (i.e., ideal self and clothing image congruity) best predicted adolescent girls' clothing purchase intentions. For the outfit image of springy, the other type of clothing symbolism (i.e., actual self and clothing image congruity) best predicted adolescent girls' clothing purchase intentions. For the sporty outfit image, both types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) did not predict adolescent girls' clothing purchase intentions.

Clothing Symbolism and Clothing Behavior (Research Question 7)

This section presents the results for Research Question 7. Research Question 7 was stated as below:

Research Question 7

For each of the four different outfit images, are the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) significantly related to girls' clothing behavior?

Sexy Outfit for Research Question 7

A standard multiple regression analysis was performed to address Research Question 7. The coefficient of multiple correlation (R) for this equation was .31 and the square of the correlation coefficient (R^2) was .10, indicating that 10% the variance in clothing behavior for the outfit with a sexy image was explained by the equation (see Table 5.18). The significant F value indicated that the equation was significant in explaining girls' clothing behavior for the outfit with a sexy image [$F(2, 381) = 20.40, p < .001$]. The t-values showed that both actual self and clothing image congruity and ideal self and clothing image congruity significantly contributed to the prediction of girls' clothing behavior for the outfit with a sexy image. The standardized regression coefficients (β) showed that ideal self and clothing image congruity ($\beta = .21$) contributed the most in explaining girls' clothing behavior for the outfit with a sexy image, followed by actual self and clothing image congruity ($\beta = .16$).

Conservative Outfit for Research Question 7

A standard multiple regression analysis was performed to address Research Question 7. The coefficient of multiple correlation (R) for the equation was .11 and the square of the correlation coefficient (R^2) was .01, indicating that 1% of the variance in clothing behavior for the outfit with a conservative image was explained by this equation (see Table 5.18). The non-significant F value indicated that the equation was not significant in explaining girls' clothing behavior for the outfit with a conservative image [$F(2, 381) = 2.47, p = .086$]. The t-values showed that ideal self and clothing image congruity significantly contributed to the prediction of girls' clothing behavior for the conservative outfit image; actual self and clothing image congruity was not significant at the .05 level.

Table 5.18. Prediction of Girls' Clothing Behavior by Clothing Symbolism: Standard Multiple Regression (Research Question 7)

	b	β	t
Sexy Outfit Image (R^2= .10)			
Constant	3.18		
Actual self and clothing image congruity	0.17	0.16	2.97[*]
Ideal self and clothing image congruity	0.25	0.21	4.03[**]
Conservative Outfit Image (R^2= .01)			
Constant	2.08		
Actual self and clothing image congruity	0.00	0.00	0.07
Ideal self and clothing image congruity	0.10	0.11	2.14[*]
Springy Outfit Image (R^2= .03)			
Constant	1.57		
Actual self and clothing image congruity	0.08	0.13	1.96
Ideal self and clothing image congruity	0.03	0.06	0.86
Sporty Outfit Image (R^2= .01)			
Constant	4.06		
Actual self and clothing image congruity	0.10	0.10	1.48
Ideal self and clothing image congruity	0.02	0.01	0.22

[*]$p < .05$, [**]$p < .001$.

Springy Outfit for Research Question 7

A standard multiple regression analysis was performed to address Research Question 7 for the springy outfit image. The coefficient of multiple correlation (*R*) for this equation was .17 and the square of the correlation coefficient (R^2) was .03, indicating that 3% of the variance in clothing behavior for the springy outfit image was explained by this equation (see Table 5.18). However, the *t*-values showed that both actual self and clothing image congruity and ideal self and clothing image congruity did not significantly contribute to the prediction of girls' clothing behavior for the springy outfit image.

Sporty Outfit for Research Question 7

A standard multiple regression analysis was performed to address Research Question 7 for the sporty outfit image. The coefficient of multiple correlation (*R*) for this equation was .11 and the square of the correlation coefficient (R^2) was .01, indicating that 1% of the variance in clothing behavior for the outfit with a sporty image was explained by this

equation (see Table 5.18). The non-significant F value indicated that this equation was not significant in explaining girls' clothing behavior for the outfit with sporty a image [$F(2, 381)$ = 2.13, p = .120]. The t-values also showed that both actual self and clothing image congruity and ideal self and clothing image congruity were not significant at the .05 level.

Based on the results of the standard multiple regression analysis for Research Question 7, for the outfit image of sexy, the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) had significant relationships with adolescent girls' clothing behavior. For the outfit image of conservative, only ideal self and clothing image congruity had a significant relationship with adolescent girls' clothing behavior. For the springy and sporty outfit images, both types of clothing symbolism did not have significant relationships with adolescent girls' clothing behavior.

Clothing Symbolism and Clothing Behavior (Research Question 8)

This section presents the results for Research Question 8. Research Question 8 was stated as below:

Research Question 8

For each of the four different outfit images, which of the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) best predicts girls' clothing behavior?

Sexy Outfit for Research Question 8

A stepwise multiple regression analysis was performed to address Research Question 8. Both types of clothing symbolism (i.e., actual self and clothing image congruity and ideal self and clothing image congruity) were significant in the equation (see Table 5.19). The coefficient of multiple correlation (R) for the equation was .31 and the square of the correlation coefficient (R^2) was .10, indicating that 10% of the variance in clothing behavior for the outfit with a sexy image was explained by this equation. The significant F value indicated that the equation was significant in explaining girls' clothing behavior for the outfit with a sexy image [$F(2, 381)$ = 20.40, $p < .001$]. The t-values showed that both actual self and clothing image congruity and ideal self and clothing image congruity significantly

contributed to the prediction of girls' clothing behavior for the outfit with a sexy image. The standardized regression coefficients (β) showed that ideal self and clothing image congruity ($\beta = .21$) contributed the most in explaining girls' clothing behavior for the outfit with a sexy image, followed by actual self and clothing image congruity ($\beta = .16$).

Table 5.19. Prediction of Girls' Clothing Behavior by Clothing Symbolism: Stepwise Multiple Regression (Research Question 8)

Step and predictor variable	R^2	ΔR^2	b	β	t
Sexy Outfit Image					
Step 1	.08	.08			
Constant			3.03		
Ideal self and clothing image congruity			.32	0.28	5.60**
Step 2	.10	.02			
Constant			3.18		
Actual self and clothing image congruity			.17	0.16	2.97*
Ideal self and clothing image congruity			.25	0.21	4.03**
Conservative Outfit Image					
Step 1	.01	.01			
Constant			2.08		
Ideal self and clothing image congruity			.10	.11	2.23*
Actual self and clothing image congruity	Did not enter the equation.				
Springy Outfit Image					
Step 1	.03	.03			
Constant			1.56		
Actual self and clothing image congruity			.10	.16	3.14**
Ideal self and clothing image congruity	Did not enter the equation.				
Sporty Outfit Image					
Step 1	.01	.01			
Constant			4.06		
Actual self and clothing image congruity			.11	.10	2.05*
Ideal self and clothing image congruity	Did not enter the equation.				

*$p < .05$, **$p < .001$.

Conservative Outfit for Research Question 8

A stepwise multiple regression analysis was performed to address Research Question 8. Only ideal self and clothing image congruity were significant in the equation (see Table 5.19). The coefficient of multiple correlation (R) for the equation was .11 and the square of the correlation coefficient (R^2) was .01, indicating that 1% of the variance in clothing behavior for the outfit with a conservative image was explained by this equation. The

significant *F* value indicated that the equation was significant in explaining girls' clothing behavior for the outfit with a conservative image [$F(1, 382) = 4.95, p < .05$]. The *t*-values showed that ideal self and clothing image congruity significantly contributed to the prediction of girls' clothing behavior for the conservative outfit image; actual self and clothing image congruity was not significant at the .05 level.

Springy Outfit for Research Question 8

A stepwise multiple regression analysis was performed to address Research Question 8 for the springy outfit image. Only actual self and clothing image congruity entered the equation (see Table 5.19). The coefficient of multiple correlation (*R*) for this equation was .16 and the square of the correlation coefficient (R^2) was .03, indicating that 3% of the variance in clothing behavior for the springy outfit image was explained by this equation. The significant *F* value indicated that this equation was significant in explaining girls' clothing behavior for the springy outfit image [$F(1, 382) = 9.87, p < .05$]. The *t*-values showed that actual self and clothing image congruity significantly contributed to the prediction of girls' clothing behavior for the springy outfit image; ideal self and clothing image congruity was not significant at the .05 level.

Sporty Outfit for Research Question 8

A stepwise multiple regression analysis was performed to address Research Question 8 for the sporty outfit image. Only actual self and clothing image congruity entered the equation (see Table 5.19). The coefficient of multiple correlation (*R*) for this equation was .10 and the square of the correlation coefficient (R^2) was .01, indicating that 1% of the variance in clothing behavior for the sporty outfit image was explained by this equation. The significant *F* value indicated that this equation was significant in explaining girls' clothing behavior for the sporty outfit image [$F(1, 382) = 4.22, p < .05$]. The *t*-values showed that actual self and clothing image congruity significantly contributed to the prediction of girls' clothing behavior for the sporty outfit image; ideal self and clothing image congruity was not significant at the .05 level.

Based on the results of the stepwise multiple regression analysis for Research Question 8, for the outfit image of sexy, both types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) best predicted adolescent girls' clothing behavior. For the conservative outfit image, only ideal self and clothing image congruity was the best predictor for adolescent girls' clothing behavior. For the outfit images of springy and sporty, only actual self and clothing image congruity was the best predictor for adolescent girls' clothing behavior.

Clothing Involvement and Clothing Purchase Intentions (Research Question 9)

This section presents the results for Research Questions 9. The results of the factor analysis revealed three factors (i.e., clothing importance, clothing expressions, clothing brand perceptions), which were reported in the section on the Preliminary Data Analyses in this chapter. However, because the coefficient alpha values for clothing expressions and clothing brand perceptions were low, indicating low internal consistency, these two factors were not included in the analysis performed to address Research Question 9. Only one factor of clothing involvement (i.e., clothing importance) was included in the analysis for each outfit image. The average of the scores for each item in the factor of clothing importance was used as its factor score that in turn was used in the analysis for addressing Research Question 9. Question 9 was stated as below:

Research Question 9

Does girls' clothing involvement contain multiple constructs? For each of the four different outfit images, are the constructs of clothing involvement significantly related to girls' clothing purchase intentions?

Sexy Outfit for Research Question 9

A correlation analysis was performed to address Research Question 9. An examination of clothing importance and girls' clothing purchase intentions for the sexy outfit image revealed a positive correlation [$r(384) = .20, p < .01$], revealing that the more participants indicated a high level of clothing importance, the more likely participants would be to purchase outfits with a sexy image (see Table 5.20).

**Table 5.20. Correlation between Perceptions of Clothing Importance and Girls'
             Clothing Purchase Intentions for Each Outfit Image (Research Question 9)**

Measure	Clothing Importance
Sexy Outfit Image	.20**
Conservative Outfit Image	- .01
Springy Outfit Image	- .05
Sporty Outfit Image	.10*

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

Conservative Outfit for Research Question 9

An examination of clothing importance and girls' clothing purchase intentions for the conservative outfit image revealed a non-significant correlation between clothing importance and girls' clothing purchase intentions [$r(384) = -.01, p > .05$] (see Table 5.20).

Springy Outfit for Research Question 9

An examination of clothing importance and girls' clothing purchase intentions for the springy outfit image revealed a non-significant negative correlation between clothing importance and girls' clothing purchase intentions [$r(384) = -.05, p > .05$] (see Table 5.20).

Sporty Outfit for Research Question 9

An examination of clothing importance and girls' clothing purchase intentions for the sporty outfit image revealed a positive correlation between clothing importance and girls' clothing purchase intentions, [$r(384) = .10, p < .05$], showing that the more participants indicated a high level of clothing importance, the more likely participants were to purchase outfits with a sporty image (see Table 5.20).

Based on the results of the correlation analysis for Research Question 9, for the outfit images of sexy and sporty, clothing importance had a significant relationship with adolescent girls' clothing purchase intentions. For the conservative and springy outfit images, clothing importance did not have a significant relationship with adolescent girls' clothing purchase intentions.

Clothing Involvement and Clothing Purchase Intentions (Research Question 10)

Question 10 was stated as below:

Research Question 10

Does girls' clothing involvement contain multiple constructs? For each of the four

different outfit images, which of the constructs of clothing involvement best predicts

girls' clothing purchase intentions?

Analysis was not performed to address Research Question 10 because only one

variable, clothing importance was included in the analysis, and a correlation analysis was

used to examine the relationship between clothing involvement and clothing purchase

intentions, which was examined in Research Question 9.

Clothing Involvement and Clothing Behavior (Research Question 11)

As in Research Question 9, only one factor of clothing involvement was included in

the analysis for each outfit image (i.e., clothing importance). The average of the scores for

each item in the factor was used as its factor score that in turn was used in the analysis for

addressing Research Question 11. Question 11 was stated as below:

Research Question 11

Does girls' clothing involvement contain multiple constructs? For each of the four

different outfit images, are the constructs of clothing involvement significantly

related to girls' clothing behavior?

Sexy Outfit for Research Question 11

A correlation analysis was performed to address Research Question 11. An

examination of clothing importance and girls' clothing behavior for the sexy outfit image

revealed a positive correlation between clothing importance and girls' clothing behavior

$[r(384) = .20, p < .01]$,], showing that the more participants indicated a high level of clothing

importance, the more likely participants would be to wear outfits with a sexy image when

hanging with their friends (see Table 5.21).

**Table 5.21. Correlation between Perceptions of Clothing Importance and Girls'
Clothing Behavior for Each Outfit Image (Research Question 11)**

Measure	Clothing Importance
Sexy Outfit Image	.20**
Conservative Outfit Image	.06
Springy Outfit Image	- .04
Sporty Outfit Image	.11*

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

Conservative Outfit for Research Question 11

An examination of clothing importance and girls' clothing behavior for the
conservative outfit image revealed a non-significant positive correlation between clothing
importance and girls' clothing behavior [$r(384) = .06, p > .05$] (see Table 5.21).

Springy Outfit for Research Question 11

An examination of clothing importance and girls' clothing behavior for the springy
outfit image revealed a non-significant negative correlation between clothing importance and
girls' clothing behavior [$r(384) = -.04, p > .05$] (see Table 5.21).

Sporty Outfit for Research Question 11

An examination of clothing importance and girls' clothing behavior for the sporty
outfit image revealed a positive correlation between clothing importance and girls' clothing
behavior [$r(384) = .11, p < .05$], showing that the more participants indicated a high level of
clothing importance, the more likely participants would be to wear outfits with a sporty
image when hanging with their friends (see Table 5.21).

Based on the results of the correlation analysis for Research Question 11, for the
outfit images of sexy and sporty, clothing importance had a significant relationship with
adolescent girls' clothing behavior. For the conservative and springy outfit images, clothing
importance did not have a significant relationship with adolescent girls' clothing behavior.

Clothing Involvement and Clothing Behavior (Research Question 12)

Research Question 12 was stated as below:

Research Question 12

Does girls' clothing involvement contain multiple constructs? For each of the four different outfit images, which of the constructs of clothing involvement best predicts girls' clothing behavior?

Analysis was not performed to address Research Question 12 because only one variable, clothing importance was included in the analysis, and a correlation analysis was used to examine the relationship between clothing involvement and clothing behavior, which was examine in Research Question 11.

Perceptions of Reference Groups' Clothing Behavior or Opinions, Clothing Symbolism, Clothing Involvement and Clothing Purchase Intentions (Research Question 13)

This section presents the results for Research Question 13. To examine this research question, six independent variables were included. They were three types of perceptions of reference groups' clothing behavior or opinions (i.e., friends, popular girls, parents), two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), and one factor of clothing involvement (i.e., clothing importance). Research Question 13 was stated as below:

Research Question 13

For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), and clothing involvement significantly related to girls' clothing purchase intentions?

Sexy Outfit for Research Question 13

A standard multiple regression analysis was performed to address Research Question 13. The coefficient of multiple correlation (R) for this equation was .64 and the square of the

correlation coefficient (R^2) was .40, indicating that 40% of the variance in clothing purchase intentions for the sexy outfit was explained by this equation (See Table 5.22). The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions for the sexy outfit [$F(6, 377) = 42.65$, $p < .001$]. The t-values showed that the three perceptions of reference groups clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior), one type of clothing symbolism (i.e., ideal self and clothing image congruity), and a factor of clothing involvement (i.e., clothing importance) had significant relationships with girls' clothing purchase intentions for the sexy outfit. For actual self and clothing image congruity, the t-value was not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .41$) contributed the most in explaining girls' clothing purchase intentions for the sexy outfit, followed in order by the perceptions of parents' opinions concerning clothing behavior ($\beta = .21$), the perceptions of popular girls' clothing behavior ($\beta = .13$), clothing importance ($\beta = .11$), ideal self and clothing image congruity ($\beta = .10$), and lastly clothing importance ($\beta = .03$).

Table 5.22. Prediction of Girls' Clothing Purchase Intentions by the Perceptions of Reference Groups' Clothing Behavior or Opinions, Clothing Symbolism, and Clothing Involvement: Standard Multiple Regression (Research Question 13)

	B	β	t
Sexy Outfit Image ($R^2 = .40$)			
Constant	-.20		
Friends' clothing behavior	.44	.41	8.58***
Popular girls' clothing behavior	.14	.13	2.67**
Parents' opinions concerning clothing behavior	.22	.21	4.91***
Actual self and clothing image congruity	.04	.03	.64
Ideal self and clothing image congruity	.15	.10	2.32*
Clothing importance	.20	.11	2.57*
Conservative Outfit Image ($R^2 = .53$)			
Constant	.14		
Friends' clothing behavior	.48	.49	10.86***
Popular girls' clothing behavior	.24	.27	5.87***
Parents' opinions concerning clothing behavior	.07	.08	2.14*
Actual self and clothing image congruity	.05	.04	1.19
Ideal self and clothing image congruity	.03	.03	.69
Clothing importance	.02	.01	.35

Springy Outfit Image ($R^2 = .39$)			
Constant	.52		
Friends' clothing behavior	.36	.39	8.51***
Popular girls' clothing behavior	.23	.31	6.72***
Parents' opinions concerning clothing behavior	.04	.07	1.53
Actual self and clothing image congruity	.03	.04	.73
Ideal self and clothing image congruity	.03	.03	.65
Clothing importance	-.01	-.01	-.26
Sporty Outfit Image ($R^2 = .60$)			
Constant	.17		
Friends' clothing behavior	.68	.61	13.67***
Popular girls' clothing behavior	.16	.15	3.51**
Parents' opinions concerning clothing behavior	.13	.11	2.97**
Actual self and clothing image congruity	.01	.00	.11
Ideal self and clothing image congruity	.03	.03	.66
Clothing importance	-.02	-.01	-.27

*$p < .05$, **p, .01, ***$p < .001$.

Conservative Outfit for Research Question 13

A standard multiple regression analysis was performed to address Research Question 13. The coefficient of multiple correlation (R) for this equation was .73 and the square of the correlation coefficient (R^2) was .53, indicating that 53% of the variance in clothing purchase intentions for the conservative outfit was explained by this equation (See Table 5.22). The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions for the conservative outfit [$F(6, 377) = 70.24, p < .001$]. The t-values showed that the three perceptions of reference groups clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior) had significant relationships with adolescent girls' clothing purchase intentions for the conservative outfit. For the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) and a factor of clothing involvement (i.e., clothing importance), the t-values were not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .49$) contributed the most in explaining girls' clothing purchase intentions for the conservative outfit, followed in order by the perceptions of popular girls' clothing behavior ($\beta = .27$), the perceptions of parents' opinions concerning clothing behavior ($\beta = .08$), actual self and clothing image congruity ($\beta = .04$), ideal self and clothing image congruity ($\beta = .03$), and lastly clothing importance ($\beta = .01$).

Springy Outfit for Research Question 13

A standard multiple regression analysis was performed to address Research Question 13. The coefficient of multiple correlation (R) for this equation was .62 and the square of the correlation coefficient (R^2) was .39, indicating that 39% of the variance in clothing purchase intentions for the springy outfit was explained by this equation (See Table 5.22). The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions for the springy outfit [$F(6, 377) = 39.62, p < .001$]. The t-values showed that only friends' clothing behavior and popular girls' clothing had significant relationships with adolescent girls' clothing purchase intentions for the springy outfit. For parents' opinions concerning clothing behavior, the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) and a factor of clothing involvement (i.e., clothing importance), the t-values were not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .39$) contributed the most in explaining girls' clothing purchase intentions for the springy outfit, followed in order by the perceptions of popular girls' clothing behavior ($\beta = .31$), and then the perceptions of parents' opinions concerning clothing behavior ($\beta = .07$), actual self and clothing image congruity ($\beta = .04$), ideal self and clothing image congruity ($\beta = .03$), and lastly clothing importance ($\beta = -.01$).

Sporty Outfit for Research Question 13

A standard multiple regression analysis was performed to address Research Question 13. The coefficient of multiple correlation (R) for this equation was .77 and the square of the correlation coefficient (R^2) was .60, indicating that 60% of the variance in clothing purchase intentions for the sporty outfit was explained by this equation (see Table 5.22). The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions for the sporty outfit [$F(6, 377) = 92.60, p < .001$]. The t-values showed that the three perceptions of reference groups clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior) had significant relationships with adolescent girls' clothing purchase intentions for the sporty outfit. For the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) and a factor of clothing

involvement (i.e., clothing importance), the t-values were not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .61$) contributed the most in explaining girls' clothing purchase intentions for the sporty outfit, followed in order by the perceptions of popular girls' clothing behavior ($\beta = .15$), the perceptions of parents' opinions concerning clothing behavior ($\beta = .11$), ideal self and clothing image congruity ($\beta = .03$), clothing importance ($\beta = -.01$), and lastly actual self and clothing image congruity ($\beta = .00$).

Based on the results of the standard multiple regression analysis for Research Question 13, for the outfit image of sexy, all three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), one type of clothing symbolism (i.e., ideal self and clothing image congruity), and a factor of clothing involvement (i.e., clothing importance) were significantly related to adolescent girls' clothing purchase intentions. For the conservative and sporty outfit images, all three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) were significantly related to adolescent girls' clothing purchase intentions. For the outfit image of springy, only friends' clothing behavior and popular girls' clothing behavior were significantly related to adolescent girls' clothing purchase intentions.

Perceptions of Reference Groups' Clothing Behavior or Opinions, Clothing Symbolism, Clothing Involvement and Clothing Purchase Intentions (Research Question 14)

This section presents the results for Research Question 14. To examine this research questions, six independent variables were included. They were three types of perceptions of reference groups' clothing behavior or opinions (i.e., friends, popular girls, parents), two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), and one factor of clothing involvement (i.e., clothing importance, Research Question 14 was stated as below:

Research Question 14

For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), or clothing involvement best predicts girls' clothing purchase intentions?

Sexy Outfit for Research Question 14

A stepwise multiple regression analysis was performed to address Research Question 14. The results of the stepwise multiple regression analysis showed that the perceptions of friends' clothing behavior, popular girls' clothing behavior, parents' opinions concerning clothing behavior, ideal self and clothing image congruity, and clothing importance entered the equation (see Table 5.23). The coefficient of multiple correlation (R) for this equation was .64 and the square of the correlation coefficient (R^2) was .40, indicating that 40% of the variance in clothing purchase intentions for the sexy outfit was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions for the sexy outfit [$F(5, 378) = 51.18, p < .001$]. The t-values showed that friends' clothing behavior, popular girls' clothing behavior, parents' opinions concerning clothing behavior, ideal self and clothing image congruity, and clothing importance significantly contributed to the prediction of girls' clothing purchase intentions for the sexy outfit. For actual self and clothing image congruity, the t-value was not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .41$) contributed the most in explaining girls' clothing purchase intentions for the sexy outfit, followed in order by the perceptions of parents' opinions concerning clothing behavior ($\beta = .21$), the perceptions of popular girls' clothing behavior ($\beta = .13$), ideal self and clothing image congruity ($\beta = .11$), and lastly clothing importance ($\beta = .11$).

Table 5.23. **Prediction of Girls' Clothing Purchase Intentions by the Perceptions of Reference Groups' Clothing Behavior or Opinions, Clothing Symbolism, and Clothing Involvement: Stepwise Multiple Regression (Research Question 14)**

Step and predictor variable	R^2	ΔR^2	b	β	t
Sexy Outfit Image					
Step 1	.31	.31			
Constant			1.07		
Friends' clothing behavior			.60	.56	13.07***
Step 2	.37	.06			
Constant			.54		
Friends' clothing behavior			.53	.49	11.60***
Parents' opinions concerning clothing behavior			.26	.25	5.88***
Step 3	.38	.02			
Constant			.81		
Friends' clothing behavior			.51	.47	11.22***
Parents' opinions concerning clothing behavior			.25	.24	5.69***
Ideal self and clothing image congruity			.19	.13	3.15**
Step 4	.39	.01			
Constant			.53		
Friends' clothing behavior			.45	.42	8.75***
Popular girls' clothing behavior			.13	.12	2.48*
Parents' opinions concerning clothing behavior			.24	.23	5.47***
Ideal self and clothing image congruity			.17	.12	2.91**
Step 5	.40	.01			
Constant			-.26		
Friends' clothing behavior			.44	.41	8.60***
Popular girls' clothing behavior			.14	.13	2.68**
Parents' opinions concerning clothing behavior			.22	.21	4.94***
Ideal self and clothing image congruity			.16	.11	2.77**
Clothing importance			.21	.11	2.67**
Actual self and clothing image congruity	Did not enter the equation.				
Conservative Outfit Image					
Step 1	.47	.47			
Constant			.50		
Friends' clothing behavior			.67	.68	18.28***
Step 2	.52	.05			
Constant			.25		
Friends' clothing behavior			.51	.51	11.79***
Popular girls' clothing behavior			.26	.28	6.47***
Step 3	.53	.01			
Constant			.11		
Friends' clothing behavior			.49	.50	11.04***
Popular girls' clothing behavior			.24	.27	6.02***
Parents' opinions concerning clothing behavior			.07	.08	2.05*
Actual self and clothing image congruity	Did not enter the equation.				
Ideal self and clothing image congruity	Did not enter the equation.				
Clothing importance	Did not enter the equation.				

	R	R^2	B	β	t
Springy Outfit Image					
Step 1	.30	.30			
Constant			.67		
Friends' clothing behavior			.50	.54	12.66***
Step 2	.38	.08			
Constant			.45		
Friends' clothing behavior			.38	.41	9.25***
Popular girls' clothing behavior			.24	.32	7.17***
Parents' opinions concerning clothing behavior	Did not enter the equation.				
Actual self and clothing image congruity	Did not enter the equation.				
Ideal self and clothing image congruity	Did not enter the equation.				
Clothing importance	Did not enter the equation.				
Sporty Outfit Image					
Step 1	.57	.57			
Constant			.52		
Friends' clothing behavior			.84	.75	22.41***
Step 2	.59	.02			
Constant			.31		
Friends' clothing behavior			.72	.64	14.96***
Popular girls' clothing behavior			.18	.17	4.00***
Step 3	.60	.01			
Constant			.05		
Friends' clothing behavior			.68	.61	13.78***
Popular girls' clothing behavior			.16	.15	3.51**
Parents' opinions concerning clothing behavior			.13	.11	2.98**
Actual self and clothing image congruity	Did not enter the equation.				
Ideal self and clothing image congruity	Did not enter the equation.				
Clothing importance	Did not enter the equation.				

*$p < .05$, **p, .01, ***$p < .001$.

Conservative Outfit for Research Question 14

A stepwise multiple regression analysis was performed to address Research Question 14. The results of the stepwise multiple regression analysis showed that the perceptions of friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior entered the equation (see Table 5.23). The coefficient of multiple correlation (R) for this equation was .72 and the square of the correlation coefficient (R^2) was .53, indicating that 53% of the variance in clothing purchase intentions for the conservative outfit was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions for the conservative outfit [$F(3, 380) = 139.89, p < .001$]. The t-values showed that friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior significantly

contributed to the prediction of girls' clothing purchase intentions for the conservative outfit. For the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) and a factor of clothing involvement (i.e., clothing importance), the t-values were not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .50$) contributed the most in explaining girls' clothing purchase intentions for the conservative outfit, followed by the perceptions of popular girls' clothing behavior ($\beta = .27$) and then the perceptions of parents' opinions concerning clothing behavior ($\beta = .08$).

Springy Outfit for Research Question 14

A stepwise multiple regression analysis was performed to address Research Question 14. The results of the stepwise multiple regression analysis showed that the perceptions of friends' clothing behavior and popular girls' clothing behavior entered the equation (see Table 5.23). The coefficient of multiple correlation (R) for this equation was .62 and the square of the correlation coefficient (R^2) was .38, indicating that 38% of the variance in clothing purchase intentions for the springy outfit was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions for the conservative outfit [$F(1, 382) = 160.14, p < .001$]. The t-values showed that the perceptions of friends' clothing behavior and popular girls' clothing behavior significantly contributed to the prediction of girls' clothing purchase intentions for the springy outfit. For parents' opinions concerning clothing behavior, the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) and a factor of clothing involvement (i.e., clothing importance), the t-values were not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .41$) contributed the most in explaining girls' clothing purchase intentions for the springy outfit, followed by the perceptions of popular girls' clothing behavior ($\beta = .32$).

Sporty Outfit for Research Question 14

A stepwise multiple regression analysis was performed to address Research Question 14. The results of the stepwise multiple regression analysis showed that the perceptions of

friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior entered the equation (see Table 5.23). The coefficient of multiple correlation (R) for this equation was .77 and the square of the correlation coefficient (R^2) was .60, indicating that 60% of the variance in clothing purchase intentions for the sporty outfit was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing purchase intentions for the sporty outfit [$F(3, 380) = 185.91, p < .001$]. The t-values showed that the perceptions of friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior significantly contributed to the prediction of girls' clothing purchase intentions for the sporty outfit image. For the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) and a factor of clothing involvement (i.e., clothing importance), the t-values were not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .61$) contributed the most in explaining girls' clothing purchase intentions for the sporty outfit, followed by the perceptions of popular girls' clothing behavior ($\beta = .15$), and then parents' opinions concerning clothing behavior ($\beta = .11$).

Based on the results of the stepwise multiple regression analysis for Research Question 14, for the outfit image of sexy, all three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), one type of clothing symbolism (i.e., ideal self and clothing image congruity), and a factor of clothing involvement (i.e., clothing importance) best predicted adolescent girls' clothing purchase intentions. For the conservative and sporty outfit images, all three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) best predicted adolescent girls' clothing purchase intentions. For the outfit image of springy, only friends' clothing behavior and popular girls' clothing behavior best predicted adolescent girls' clothing purchase intentions.

Perceptions of Reference Groups' Clothing Behavior or Opinions, Clothing Symbolism, Clothing Involvement and Clothing Behavior (Research Question 15)

This section presents the results for Research Question 15. To examine this research question, six independent variables were included. They were three types of perceptions of reference groups' clothing behavior or opinions (i.e., friends, popular girls, parents), two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), and one factor of clothing involvement (i.e., clothing importance). Research Question 15 was stated as below:

Research Question 15

For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), and clothing involvement significantly related to girls' clothing behavior?

Sexy Outfit for Research Question 15

A standard multiple regression analysis was performed to address Research Question 15. The coefficient of multiple correlation (R) for this equation was .56 and the square of the correlation coefficient (R^2) was .31, indicating that 31% of the variance in clothing behavior for the sexy outfit image was explained by this equation (see Table 5.24). The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the sexy outfit image [$F(6, 377) = 28.67, p < .001$]. The t-values showed that two perceptions of reference groups clothing behavior or opinions (i.e., friends' clothing behavior, parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), and a factor of clothing involvement (i.e., clothing importance) had significant relationships with adolescent girls' clothing purchase intentions for the sexy image outfit. For popular girls' clothing behavior, the t-value for this variable was not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .33$) contributed the most in explaining girls' clothing behavior for the sexy outfit, followed in

order by the perceptions of parents' opinions concerning clothing behavior ($\beta = .19$), ideal self and clothing image congruity ($\beta = .14$), actual self and clothing image congruity ($\beta = .11$), and lastly clothing importance ($\beta = .10$).

Table 5.24. Prediction of Girls' Clothing Behavior by the Perceptions of Reference Groups' Clothing Behavior or Opinions, Clothing Symbolism, and Clothing Involvement: Standard Multiple Regression (Research Question 15)

	B	β	t
Sexy Outfit Image ($R^2 = .31$)			
Constant	.71		
Friends' clothing behavior	.28	.33	6.41***
Popular girls' clothing behavior	.05	.06	1.15
Parents' opinions concerning clothing behavior	.16	.19	4.19***
Actual self and clothing image congruity	.11	.11	2.23*
Ideal self and clothing image congruity	.17	.14	3.07**
Clothing importance	.15	.10	2.24*
Conservative Outfit Image ($R^2 = .46$)			
Constant	.19		
Friends' clothing behavior	.39	.49	10.04***
Popular girls' clothing behavior	.12	.17	3.44**
Parents' opinions concerning clothing behavior	.10	.14	3.31**
Actual self and clothing image congruity	-.01	-.01	-.17
Ideal self and clothing image congruity	.05	.06	1.39
Clothing importance	.08	.06	1.54
Springy Outfit Image ($R^2 = .36$)			
Constant	.76		
Friends' clothing behavior	.31	.42	8.99***
Popular girls' clothing behavior	.12	.20	4.26***
Parents' opinions concerning clothing behavior	.05	.11	2.42*
Actual self and clothing image congruity	.05	.07	1.41
Ideal self and clothing image congruity	.02	.04	.66
Clothing importance	-.02	-.02	-.47
Sporty Outfit Image ($R^2 = .57$)			
Constant	.46		
Friends' clothing behavior	.61	.59	12.92***
Popular girls' clothing behavior	.13	.13	2.92**
Parents' opinions concerning clothing behavior	.12	.12	3.05**
Actual self and clothing image congruity	.04	.04	.94
Ideal self and clothing image congruity	.01	.01	.26
Clothing importance	.01	.00	.09

*$p < .05$, **$p, .01$, ***$p < .001$.

Conservative Outfit for Research Question 15

A standard multiple regression analysis was performed to address Research Question 15. The coefficient of multiple correlation (R) for this equation was .68 and the square of the correlation coefficient (R^2) was .46, indicating that 46% of the variance in clothing behavior for the conservative outfit image was explained by this equation (see Table 5.24). The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the conservative outfit image [$F(6, 377) = 53.28, p < .001$]. The t-values showed that the three perceptions of reference groups clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior) had significant relationships with adolescent girls' clothing purchase intentions for the conservative image outfit. For the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) and a factor of clothing involvement (i.e., clothing importance), the t-values for these variables were not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .49$) contributed the most in explaining girls' clothing purchase intentions for the conservative outfit image, followed in order by the perceptions of popular girls' clothing behavior ($\beta = .17$), the perceptions of parents' opinions concerning clothing behavior ($\beta = .14$), ideal self and clothing image congruity ($\beta = .06$), clothing importance ($\beta = .06$), and lastly actual self and clothing image congruity ($\beta = -.01$).

Springy Outfit for Research Question 15

The coefficient of multiple correlation (R) for this equation was .60 and the square of the correlation coefficient (R^2) was .36, indicating that 36% of the variance in clothing behavior for the springy outfit image was explained by this equation (see Table 5.24). The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the springy outfit [$F(6, 377) = 34.96 \ p < .001$]. The t-values showed that the three perceptions of reference groups clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior) had significant relationships with adolescent girls' clothing purchase intentions for the springy image outfit. For the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), and a factor of clothing

involvement (i.e., clothing importance), the *t*-values for these variables were not significant at the .05 level. The standardized regression coefficients (*β*) showed that the perceptions of friends' clothing behavior (*β* = .42) contributed the most in explaining girls' clothing behavior for the springy outfit, followed in order by the perceptions of popular girls' clothing behavior (*β* = .20), the perceptions of parents' opinions concerning clothing behavior (*β* = .11), actual self and clothing image congruity (*β* = .07), ideal self and clothing image congruity (*β* = .04), and lastly clothing importance (*β* = -.02).

Sporty Outfit for Research Question 15

A standard multiple regression analysis performed to address examine Research Question 15. The coefficient of multiple correlation (*R*) for this equation was .75 and the square of the correlation coefficient (R^2) was .57, indicating that 57% of the variance in clothing behavior for the sporty outfit image was explained by this equation (see Table 5.24). The significant *F* value indicated that this equation was significant in explaining girls' clothing behavior for the sporty outfit image [$F(6, 377) = 81.92$, $p < .001$]. The *t*-values showed that the three perceptions of reference groups clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior) had significant relationships with adolescent girls' clothing purchase intentions for the springy image outfit. For the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), and a factor of clothing involvement (i.e., clothing importance), the *t*-values for these variables were not significant at the .05 level. The standardized regression coefficients (*β*) showed that the perceptions of friends' clothing behavior (*β* = .59) contributed the most in explaining girls' clothing behavior for the sporty outfit, followed in order by the perceptions of popular girls' clothing behavior (*β* = .13), the perceptions of parents' opinions concerning clothing behavior (*β* = .12), actual self and clothing image congruity (*β* = .04), ideal self and clothing image congruity (*β* = .01), and lastly clothing importance (*β* = .00).

Based on the results of the standard multiple regression analysis for Research Question 15, for the outfit image of sexy, two perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior and parents' opinions concerning

clothing behavior), the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), and a factor of clothing involvement (i.e., clothing importance) were significantly related to adolescent girls' clothing behavior. For the conservative, springy, and sporty outfit images, all three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) were significantly related to adolescent girls' clothing behavior.

Perceptions of Reference Groups' Clothing Behavior or Opinions, Clothing Symbolism, Clothing Involvement and Clothing Behavior (Research Question 16)

This section presents the results for Research Question 16. To examine this research question, six independent variables were included. They were three types of perceptions of reference groups' clothing behavior or opinions (i.e., friends, popular girls, parents), two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), and one factor of clothing involvement (i.e., clothing importance). Research Question 16 was stated as below:

Research Question 16

For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), or clothing involvement best predicts girls' clothing behavior?

Sexy Outfit for Research Question 16

A stepwise multiple regression analysis was performed to address Research Question 16. The results of the stepwise multiple regression analysis showed that the perceptions of friends' clothing behavior and parents' opinions concerning clothing behavior, actual self and clothing image congruity and ideal self and clothing image congruity, and clothing importance entered the equation (see Table 5.25). The coefficient of multiple correlation (R) for this equation was .56 and the square of the correlation coefficient (R^2) was .31, indicating

that 31% of the variance in clothing behavior for the sexy outfit image was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the sexy outfit image [$F(5, 378) = 34.11$, $p < .001$]. The t-values showed that the perceptions of friends' clothing behavior and parents' opinions concerning clothing behavior, actual self and clothing image congruity and ideal self and clothing image congruity, and clothing importance significantly contributed to the prediction of girls' clothing behavior for the sexy outfit image. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .35$) contributed the most in explaining girls' clothing behavior for the sexy outfit, followed in order by the perceptions of parents' opinions concerning clothing behavior ($\beta = .20$), ideal self and clothing image congruity ($\beta = .15$), actual self and clothing image congruity ($\beta = .11$), and lastly clothing importance ($\beta = .10$).

Table 5.25. Prediction of Girls' Clothing Behavior by the Perceptions of Reference Groups' Clothing Behavior or Opinions, Clothing Symbolism, and Clothing Involvement: Stepwise Multiple Regression (Research Question 16)

Step and predictor variable	R^2	ΔR^2	b	β	t
Sexy Outfit Image					
Step 1	.20	.20			
Constant			1.32		
Friends' clothing behavior			.39	.45	9.87***
Step 2	.25	.05			
Constant			.92		
Friends' clothing behavior			.33	.39	8.47***
Parents' opinions concerning clothing behavior			.19	.23	5.11***
Step 3	.29	.04			
Constant			1.25		
Friends' clothing behavior			.31	.36	8.02***
Parents' opinions concerning clothing behavior			.15	.22	4.89***
Ideal self and clothing image congruity			.22	.20	4.44***
Step 4	.30	.01			
Constant			1.40		
Friends' clothing behavior			.31	.36	7.98***
Parents' opinions concerning clothing behavior			.18	.21	4.73***
Actual self and clothing image congruity			.12	.12	2.50*
Ideal self and clothing image congruity			.17	.15	3.18**
Step 5	.31	.01			
Constant			.85		
Friends' clothing behavior			.30	.35	7.93***
Parents' opinions concerning clothing behavior			.16	.20	4.33***
Actual self and clothing image congruity			.11	.11	2.23*

	R^2	ΔR^2	B	β	t
Ideal self and clothing image congruity			.17	.15	3.19**
Clothing importance			.15	.10	2.16*
Popular girls' clothing behavior	Did not enter the equation.				
Conservative Outfit Image					
Step 1	.41	.41			
Constant			.77		
Friends' clothing behavior			.52	.64	16.33***
Step 2	.44	.03			
Constant			.50		
Friends' clothing behavior			.46	.58	13.79***
Parents' opinions concerning clothing behavior			.12	.17	4.13***
Step 3	.45	.02			
Constant			.43		
Friends' clothing behavior			.40	.49	10.19***
Popular girls' clothing behavior			.12	.16	3.37**
Parents' opinions concerning clothing behavior			.10	.15	3.51**
Actual self and clothing image congruity	Did not enter the equation.				
Ideal self and clothing image congruity	Did not enter the equation.				
Clothing importance	Did not enter the equation.				
Springy Outfit Image					
Step 1	.30	.30			
Constant			.78		
Friends' clothing behavior			.41	.55	12.77***
Step 2	.34	.04			
Constant			.66		
Friends' clothing behavior			.34	.46	9.95***
Popular girls' clothing behavior			.13	.22	4.76***
Step 3	.35	.01			
Constant			.57		
Friends' clothing behavior			.32	.43	9.33***
Popular girls' clothing behavior			.12	.20	4.37***
Parents' opinions concerning clothing behavior			.05	.10	2.36*
Step 4	.36	.01			
Constant			.66		
Friends' clothing behavior			.31	.42	8.99***
Popular girls' clothing behavior			.12	.20	4.42***
Parents' opinions concerning clothing behavior			.05	.11	2.45*
Actual self and clothing image congruity			.06	.10	2.24*
Ideal self and clothing image congruity	Did not enter the equation.				
Clothing importance	Did not enter the equation.				
Sporty Outfit Image					
Step 1	.54	.54			
Constant			.82		
Friends' clothing behavior			.76	.73	21.12***
Step 2	.55	.02			
Constant			.49		
Friends' clothing behavior			.69	.67	17.70***
Parents' opinions concerning clothing behavior			.15	.14	3.61***
Step 3	.56	.01			
Constant			.38		
Friends' clothing behavior			.62	.60	13.06***
Popular girls' clothing behavior			.13	.13	2.89**
Parents' opinions concerning clothing behavior			.13	.12	3.13**

Actual self and clothing image congruity	Did not enter the equation.
Ideal self and clothing image congruity	Did not enter the equation.
Clothing importance	Did not enter the equation.

Conservative Outfit for Research Question 16

      A stepwise multiple regression analysis was performed to address Research Question 16. The results of the stepwise multiple regression analysis showed that the perceptions of friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior entered the equation (see Table 5.25). The coefficient of multiple correlation (R) for this equation was .67 and the square of the correlation coefficient (R^2) was .45, indicating that 45% of the variance in clothing behavior for the conservative outfit was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the conservative outfit image [$F(3, 380) = 104.85$, $p < .001$]. The t-values showed that the three perceptions of friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior significantly contributed to the prediction of girls' clothing behavior for the conservative outfit image. For the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), and a factor of clothing involvement (i.e., clothing importance), the t-values for these variables were not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .49$) contributed the most in explaining girls' clothing behavior for the conservative outfit image, followed by the perceptions of popular girls' clothing behavior ($\beta = .16$) and then the perceptions of parents' opinions concerning clothing behavior ($\beta = .15$).

Springy Outfit for Research Question 16

      A stepwise multiple regression analysis was performed to address Research Question 16. The results of the stepwise multiple regression analysis showed that the perceptions of friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior, and actual self and clothing image congruity entered the equation (see Table 5.25). The coefficient of multiple correlation (R) for this equation was .60 and the

square of the correlation coefficient (R^2) was .36, indicating that 36% of the variance in clothing behavior for the springy outfit image was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the springy outfit image [$F(4, 379) = 52.49, p < .001$]. The t-values showed that the perceptions of friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior, and actual self and clothing image congruity significantly contributed to the prediction of girls' clothing purchase intentions for the springy outfit image. For one type of clothing symbolism (i.e., ideal self and clothing image congruity) and a factor of clothing involvement (i.e., clothing importance), the t-values for these variables were not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing behavior ($\beta = .42$) contributed the most in explaining girls' clothing behavior for the springy outfit, followed by the perceptions of popular girls' clothing behavior ($\beta = .20$), the perceptions of parents' opinions concerning clothing behavior ($\beta = .11$) and lastly actual self and clothing image congruity ($\beta = .10$).

Sporty Outfit for Research Question 16

A stepwise multiple regression analysis was performed to address Research Question 16. The results of the stepwise multiple regression analysis showed that the perceptions of friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior entered the equation (see Table 5.25). The coefficient of multiple correlation (R) for this equation was .75 and the square of the correlation coefficient (R^2) was .56, indicating that 56% of the variance in clothing behavior for the sporty outfit image was explained by this equation. The significant F value indicated that this equation was significant in explaining girls' clothing behavior for the sporty outfit image [$F(3, 380) = 163.59, p < .001$]. The t-values showed that the perceptions of friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior significantly contributed to the prediction of girls' clothing behavior for the sporty outfit image. For the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), and a factor of clothing involvement (i.e., clothing importance), the t-values for these variables were not significant at the .05 level. The standardized regression coefficients (β) showed that the perceptions of friends' clothing

behavior ($\beta = .60$) contributed the most in explaining girls' clothing behavior for the sporty outfit, followed by the perceptions of popular girls' clothing behavior ($\beta = .13$), and then the perceptions of parents' opinions concerning clothing behavior ($\beta = .12$).

Based on the results of the stepwise multiple regression analysis for Research Question 16, for the outfit image of sexy, two perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior and parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity), and a factor of clothing involvement (i.e., clothing importance) best predicted adolescent girls' clothing behavior. For the outfit image of springy, all three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) and one type of clothing symbolism (i.e., actual self and clothing image congruity) best predicted adolescent girls' clothing behavior. For the conservative and sporty outfit images, all three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) best predicted adolescent girls' clothing behavior.

Summary

Four tables, Tables 5.26, 5.27, 5.28, and 5.29, are used to summarize the results of the statistical analysis to address the Research Questions concerning the relationships of several independent variables on adolescent girls' clothing purchase intentions and clothing behavior with respect to the four outfit images included in the study. The independent variables are (a) the perceptions of reference groups clothing behavior or opinions, (b) clothing symbolism, (d) clothing involvement, and (e) the combination of all variables. Each table is organized according to the order of the Research Questions. Under each research question, the results for each of the four outfit images are listed, and a conclusion for each of the Research Questions is given.

Table 5.26. Summary of the Results from the Statistical Analysis to Address the Research Questions about Perceptions of Reference Groups' Clothing Behavior or Opinions

Outfit Image	Significant variables according to the relative magnitudes of the beta weights	Conclusion for each Research Question

Research Question 1

For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior) significantly related to girls' clothing purchase intentions?

Sexy	1. Friends 2. Parents 3. Popular girls	For the sexy outfit, friends' clothing behavior, parents' opinions concerning clothing behavior, and popular girls' clothing behavior were significantly related to girls' clothing purchase intentions.
Conservative	1. Friends 2. Popular girls 3. Parents	For the conservative outfit, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior were significantly related to girls' clothing purchase intentions.
Springy	1. Friend 2. Popular girls	For the springy outfit, friends' clothing behavior and popular girls' clothing behavior were significantly related to girls' clothing purchase intentions.
Sporty	1. Friends 2. Popular girls 3. Parents	For the sporty outfit, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior were significantly related to girls' clothing purchase intentions.

Research Question 2

For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends clothing behavior, popular girls clothing behavior, or parents' opinions concerning clothing behavior) best predicts girls' clothing purchase intentions?

Sexy	1. Friends 2. Parents 3. Popular girls	For the sexy outfit, friends' clothing behavior, parents' opinions concerning clothing behavior, and popular girls' clothing behavior best predicted girls' clothing purchase intentions.
Conservative	1. Friends 2. Popular girls 3. Parents	For the conservative outfit, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior best predicted girls' clothing purchase intentions.
Springy	1. Friends 2. Popular girls	For the springy outfit, friends' clothing behavior and popular girls' clothing behavior best predicted girls' clothing purchase intentions.
Sporty	1. Friends 2. Popular girls 3. Parents	For the sporty outfit, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior best predicted girls' clothing purchase intentions.

Research Question 3

For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends clothing behavior, popular girls clothing behavior, or parents' opinions concerning clothing behavior) significantly related to girls' clothing behavior?

Sexy	1. Friends 2. Parents	For the sexy outfit image, friends' clothing behavior and parents' opinions concerning clothing behavior significantly related to girls' clothing behavior.
Conservative	1. Friends 2. Popular girls 3. Parents	For the conservative outfit image, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior were significantly related to girls' clothing behavior.
Springy	1. Friends 2. Popular girls 3. Parents	For the springy outfit image, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior were significantly related to girls' clothing behavior.
Sporty	1. Friends 2. Popular girls 3. Parents	For the sporty outfit image, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior were significantly related to girls' clothing behavior.

Research Question 4

For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends clothing behavior, popular girls clothing behavior, or parents' opinions concerning clothing behavior) best predicts girls' clothing behavior?

Sexy	1. Friends 2. Parents	For the sexy outfit image, friends' clothing behavior and parents' opinions concerning clothing behavior best predicted girls' clothing behavior.
Conservative	1. Friends 2. Popular girls 3. Parents	For the conservative outfit image, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior best predicted girls' clothing behavior.
Springy	1. Friends 2. Popular girls 3. Parents	For the springy outfit image, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior best predicted girls' clothing behavior.
Sporty	1. Friends 2. Popular girls 3. Parents	For the sporty outfit image, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior best predicted girls' clothing behavior.

Table 5.27. Summary of the Results for the Statistical Analysis to Address the Research Questions Concerning Clothing Symbolism

Outfit Image	Significant variables according to the relative magnitudes the beta weights	Conclusion for each Research Question

Research Question 5

For each of the four different outfit images, are the two types of clothing symbolism, (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) significantly related to girls' clothing purchase intentions?

Sexy	Ideal self and clothing image congruity	For the sexy outfit image, one type of clothing symbolism (i.e., ideal self and clothing image congruity) was significantly related to girls' clothing purchase intentions.
Conservative	None	For the springy outfit image, both types of clothing symbolism, (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) were not significantly related to girls' clothing purchase intentions.
Springy	None	For the springy outfit image, both types of clothing symbolism, (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) were not significantly related to girls' clothing purchase intentions.
Sporty	None	For the sporty outfit image, both types of clothing symbolism, (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) were not significantly related to girls' clothing purchase intentions.

Research Question 6

For each of the four different outfit images, which of the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) best predicts girls' clothing purchase intentions?

Sexy	Ideal self and clothing image congruity	For the sexy outfit image, ideal self and clothing image congruity best predicted girls' clothing purchase intentions.
Conservative	Ideal self and clothing image congruity	For the conservative outfit image, ideal self and clothing image congruity best predicted girls' clothing purchase intentions.
Springy	Actual self and clothing image congruity	For the springy outfit image, actual self and clothing image congruity best predicted girls' clothing purchase intentions.
Sporty	None	For the sporty outfit image, clothing symbolism was not a good predictor of girls' clothing purchase intentions.

Research Question 7

For each of the four different outfit images, are the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) significantly related to girls' clothing behavior?

Sexy	1. Ideal self and clothing image congruity 2. Actual self and clothing image congruity	For the sexy outfit image, actual self and clothing image congruity and ideal self and clothing image congruity were significantly related to girls' clothing behavior.
Conservative	Ideal self and clothing image congruity	For the conservative outfit image, ideal self and clothing image congruity were significantly related to girls' clothing behavior.
Springy	None	For the springy outfit image, clothing symbolism was not significantly related to girls' clothing behavior.
Sporty	None	For the sporty outfit image, clothing symbolism was not significantly related to girls' clothing behavior.

Research Question 8

For each of the four different outfit images, which of the two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity) best predicts girls' clothing behavior?

Sexy	1. Ideal self and clothing image congruity 2. Actual self and clothing image congruity	For the sexy outfit image, actual self and clothing image congruity and ideal self and clothing image congruity best predicted girls' clothing behavior.
Conservative	Ideal self and clothing image congruity	For the conservative outfit image, ideal self and clothing image congruity best predicted girls' clothing behavior.
Springy	Actual self and clothing image congruity	For the springy outfit image, actual self and clothing image congruity best predicted girls' clothing behavior.
Sporty	Actual self and clothing image congruity	For the sporty outfit image, actual self and clothing image congruity best predicted girls' clothing behavior.

Table 5.28. Summary of the Results of the Statistical Analysis of the Research Questions Concerning Clothing Involvement

Outfit Image	Significant variables according to the relative magnitude of the beta weights	Conclusion for each Research Question

Research Question 9-12

Does girls' clothing involvement contain multiple constructs? | | For the four types of outfit images, girls' clothing involvement contains three different constructs (i.e., clothing importance, clothing expressions, clothing brand perceptions). However, because the coefficient alpha values for clothing expressions and clothing brand perceptions were low, indicating low internal consistency, these two factors were not included in the analysis performed to address the Research Question 9. Only one factor of clothing involvement (i.e., clothing importance) was included in the analysis for each outfit image.

Research Question 9

For each of the four different outfit images, are the constructs of clothing involvement significantly related to girls' clothing purchase intentions?

Sexy	Clothing importance	For the sexy outfit image, clothing importance was significantly related to girls' clothing purchase intentions.
Conservative	None	For the conservative outfit image, clothing importance was not significantly related to girls' clothing purchase intentions.
Springy	None	For the springy outfit image, clothing importance was not significantly related to girls' clothing purchase intentions.
Sporty	Clothing importance	For the sporty outfit image, clothing importance was significantly related to girls' clothing purchase intentions.

Research Question 10

For each of the four different types of outfit images, which of the constructs of clothing involvement best predicts girls' clothing purchase intentions?

Analysis was not performed to address Research Question 10 because only one variable, clothing importance was included in the analysis, and a correlation analysis was used to examine the relationship between clothing involvement and clothing purchase intentions, which was examined in Research Question 9.

Research Question 11

For each of the four different outfit images, which of the constructs of clothing involvement are significantly related to girls' clothing behavior?

Sexy	Clothing importance	For the sexy outfit image, clothing importance was significantly related to girls' clothing behavior.
Conservative	None	For the conservative outfit image, clothing importance was not significantly related to girls' clothing behavior.
Springy	None	For the springy outfit image, clothing importance was not significantly related to girls' clothing behavior.
Sporty	Clothing importance	For the sporty outfit image, clothing importance was significantly related to girls' clothing behavior.

Research Question 12

For each of the four different outfit images, which of the constructs of clothing involvement best predicts girls' clothing behavior?

Analysis was not performed to address Research Question 12 because only one variable, clothing importance was included in the analysis, and a correlation analysis was used to examine the relationship between clothing involvement and clothing behavior, which was examined in Research Question 11.

Table 5.29. Summary of the Results of the Statistical Analysis for Addressing the Research Questions Concerning Perceptions of Reference Groups Clothing Behavior or Opinions, Clothing Symbolism, and Clothing Involvement

Outfit Image	Significant variables based according to the relative magnitudes of the beta weights	Conclusion for each Research Question

Research Question 13

For each of the four different outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), and clothing involvement significantly related to girls' clothing purchase intentions?

Sexy	1. Friends 2. Parents 3. Popular girls 4. Clothing importance 5. Ideal self and clothing image congruity	For the sexy image outfit, friends' clothing behavior, parents' opinions concerning clothing behavior, popular girls' clothing behavior, clothing importance, and ideal self and clothing image congruity, were significantly related to girls' clothing purchase intentions.
Conservative	1. Friends 2. Popular girls 3. Parents	For the conservative image outfit, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior were significantly related to girls' clothing purchase intentions.
Springy	1. Friends 2. Popular girls	For the springy image outfit, friends' clothing behavior and popular girls' clothing behavior were significantly related to girls' clothing purchase intentions.
Sporty	1. Friends 2. Popular girls 3. Parents	For the sporty image outfit, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior were significantly related to girls' clothing purchase intentions.

Research Question 14

For each of the four different outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), or clothing involvement best predicts girls' clothing purchase intentions?

Sexy	1. Friends 2. Parents 3. Popular girls 4. Ideal self and clothing image congruity 5. Clothing importance	For the sexy image outfit, friends' clothing behavior, parents' opinions concerning clothing behavior, popular girls' clothing behavior, ideal self and clothing image congruity, and clothing importance best predicted girls' clothing purchase intentions.
Conservative	1. Friends 2. Popular girls 3. Parents	For the conservative image outfit, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior best predicted girls' clothing purchase intentions.

Springy	1. Friends 2. Popular girls	For the springy image outfit, friends' clothing behavior and popular girls' clothing behavior best predicted girls' clothing purchase intentions.
Sporty	1. Friends 2. Popular girls 3. Parents	For the sporty image outfit, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior best predicted girls' clothing purchase intentions.

Research Question 15

For each of the four different types of outfit images, are the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), and clothing involvement significantly related to girls' clothing behavior?

Sexy	1. Friends 2. Parents 3. Ideal self and clothing image congruity 4. Actual self and clothing image congruity 5. Clothing importance	For the sexy outfit image, friends' clothing behavior, parents' opinions concerning clothing behavior, ideal self and clothing image congruity, actual self and clothing image congruity, and clothing importance were significantly related to girls' clothing behavior.
Conservative	1. Friends 2. Popular girls 3. Parents	For the conservative outfit image, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior were significantly related to girls' clothing behavior.
Springy	1. Friends 2. Popular girls 3. Parents	For the springy outfit image, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior were significantly related to girls' clothing behavior.
Sporty	1. Friends 2. Popular girls 3. Parents	For the sporty outfit image, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior were significantly related to girls' clothing behavior.

Research Question 16

For each of the four different types of outfit images, which of the three perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, or parents' opinions concerning clothing behavior), the two types of clothing symbolism (i.e., ideal self and clothing image congruity and/or actual self and clothing image congruity), or clothing involvement best predicts girls' clothing behavior?

Sexy	1. Friends 2. Parents 3. Ideal self and clothing image congruity 4. Actual self and clothing image congruity 5. Clothing importance	For the sexy outfit image, friends' clothing behavior, parents' opinions concerning clothing behavior, ideal self and clothing image congruity, actual self and clothing image congruity, and clothing importance best predicted girls' clothing behavior.
Conservative	1. Friends 2. Popular girls 3. Parents	For the conservative outfit image, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior best predicted girls' clothing behavior.

Springy	1. Friends 2. Popular girls 3. Parents 4. Actual self and clothing image congruity	For the springy outfit image, friends' clothing behavior, popular girls' clothing behavior, parents' opinions concerning clothing behavior, and actual self and clothing image congruity best predicted girls' clothing behavior.
Sporty	1. Friends 2. Popular girls 3. Parents	For the sporty outfit image, friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior best predicted girls' clothing behavior.

CHAPTER VI

DISCUSSION, IMPLICATIONS, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH

This chapter includes six sections. The first section presents the summary of the results of the standard multiple regression analysis. The second section contains a discussion of the results and implications of the influences of reference groups (i.e., perceptions of friends' clothing behavior, popular girls' clothing behavior, parents' opinions concerning clothing behavior). The third section contains a discussion of the results and implications of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity). The fourth section contains a discussion of the results and implications of clothing involvement. The fifth section presents conclusions of the study. Limitations of the study and recommendations for future research are addressed in the last section.

Summary of the Results of the Standard Multiple Regression Analysis

The purpose of this research is to examine the relationship between each of three independent variables (i.e., reference groups, clothing symbolism, and clothing involvement) and adolescents' clothing purchase intentions and clothing behavior, and whether the three independent variables are predictors of adolescents' clothing purchase intentions and clothing behavior. The results of the standard multiple regression analysis for the sexy outfit image showed that when all six independent variables included in the study were examined for relationships with clothing purchase intentions and clothing behavior for this outfit image, five variables had significant relationships with clothing purchase intentions and clothing behavior. One type of clothing symbolism (i.e., actual self and clothing image congruity) did not have a significant relationship with adolescent girls' clothing purchase intentions, and

one reference group (i.e., popular girls clothing behavior) did not have a significant relationship with adolescent girls' clothing behavior. For the conservative and sporty outfit images, only perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, parents' opinions concerning clothing behavior) had significant relationships with adolescent girls' clothing purchase intentions and clothing behavior. For the outfit with a springy image, only two perceptions of reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior) had significant relationships with adolescent girls' clothing purchase intentions, and all three perceptions of reference groups' clothing behavior or opinions were significantly related to adolescent girls' clothing behavior.

The following sections are discussions and implications based on the results of the stepwise multiple regression because this analysis helps to answer the Research Questions which variables are the best predictors of purchase intentions and clothing behavior. The stepwise multiple regression analysis in this study helps to identify variables that should be a focal concern for marketers in predicting specific influences on the outfit images that adolescent girls will purchase or wear. The results of the stepwise multiple regression analysis enable the development of marketing strategies in the areas where apparel companies can most efficiently target and fulfill the needs of adolescent girls.

Influences of Reference Groups

The purpose of Research Questions 14 and 16 was to determine which of the six variables included in the study, best predict adolescent girls' clothing purchase intentions and behavior. Results showed that all of the three variables concerning reference groups' clothing behavior or opinions (i.e., friends' clothing behavior, popular girls' clothing behavior, parents' opinions concerning clothing behavior) entered the stepwise regression equations for addressing Research Questions 14 and 16 for all four outfit images, except for parents' opinions concerning clothing behavior for clothing purchase intentions for the springy outfit image and popular girls' clothing behavior for clothing behavior for the sexy outfit image. These results show the importance of reference groups' clothing behavior or opinions in adolescents' clothing purchase intentions and clothing behavior. These findings are

consistent with those of Chen-Yu and Seock (2002), who showed that for male and female high school students in the 9th and 12th grades friends are the most important clothing information source. The authors suggest that clothing is a product with high social risk, and adolescents rely mostly on personal sources for clothing information. Moschis (1987) explains that reference groups' social interactions are often face to face, which can have immediate influences on an adolescent; therefore, reference groups play a significant role in adolescents' behaviors.

Friends' Influences

When all six independent variables included in the study were examined for being the best predictors of clothing purchase intentions and clothing behavior, the perceptions of friends' clothing behavior consistently emerged among the best predictors for all four outfit images. These results suggest the power of the influence of friends on adolescent girls' clothing behavior. Adolescent girls' have a high level of concern about their friends' clothing behavior, and peers have a strong influence on female adolescents' clothing behavior. When adolescents observe their friends wearing a clothing product, they may also want to purchase and wear similar items. These results are consistent with those in many previous studies, which also showed that friends were the most important clothing influence for adolescents (Chen-Yu & Seock, 2002; Grant & Stephen, 2005; Makgosa & Mohube, 2007; Nelson & McLeod, 2005; Palan, 2001; Vieria, 2009).

The conformity theory and the social identity theory may explain why adolescents want to purchase and wear items like their peers do. The conformity theory suggests that conformity is the tendency of opinions to establish a group norm and that individuals tend to comply with that group norm; therefore, adolescents may tend to follow (i.e., conform to) the norms of their peers when purchasing clothing or choosing clothing to wear when hanging out with friends in order to gain peer acceptance. Several studies also have addressed the effect of peers on conformity in clothing behavior and may provide an explanation for the power of peers on adolescents' clothing behavior. Shim and Koh (1997) found that adolescents who conformed to the clothing norms of their peers were more likely to be accepted in their social environment than were those who expressed their individualism. Lachance, Beaudoin, and Robitaille (2003) found that adolescents' conformity to clothing

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patterns that occurred within social interactions was a significant factor in peer acceptance. A study by Kim, Rhee, and Yee (2008) showed that among 6th grade, 9th grade, and 10th grade adolescents, those in the 9th grade exhibited the greatest conformity to peers, which led to clothing conformity.

Social Identity Theory, which was proposed by Tajfel and Turner in 1979, focused on intergroup relations. This theory suggests that people develop a sense of membership and belonging in particular groups; therefore, peer groups may have a central role in social development in adolescence and may be a central feature of adolescent life (Tarrant, 2002). Furthermore, the social identity theory asserts that social identity results from categorization in the social group; therefore, one's social identity may be developed or maintained by purchasing the same clothes as a particular peer group and wearing these clothes when hanging out with friends to enhance membership within a peer group. Adolescents typically identify their peer groups according to their preferred clothing styles (Sussman, Unger, & Dent, 2004). Tarrant (2002) reported that adolescents indicate that the in-group (i.e., their own group) is fun and wears fashionable clothes.

To help adolescents cope with peer pressure, a unit on peer pressure and conformity may be developed and included in an educational program, with the hope of increasing adolescent students' awareness of the influence that peers have on their lives and their choices, such as the clothing they purchase and wear. The unit could show how a peer group functions and how it can exert control over members' behaviors as well as how adolescents can avoid the pitfalls of peer pressure. Teaching the unit may help increase adolescent students' resistance to negative effects of peer pressure and help them learn to think for themselves when making decisions.

Popular Girls' Influences

When all six independent variables included in the study were examined for being the best predictors of clothing purchase intentions and clothing behavior, the perceptions of popular girls' clothing behavior consistently emerged as the second or third best predictor for all four outfit images, except in the case of clothing behavior for the sexy outfit. These results suggest the power of popular girls' influence over adolescent girls in terms of purchase intentions and clothing behavior. A study by de Bruyn and Cillessen (2006) indicated that

adolescents are highly aware of popular peers. In addition, adolescents deem that popular girls stand out from their peers by having many friends and being considered attractive and fashionable (de Bruyn & Cillessen, 2006; Owens & Duncan, 2009). Adolescents often compare themselves to popular peers. The theory of social comparison suggests that humans have a drive to evaluate themselves by comparison to some standard; however, if no objective standard exists, comparisons would be made to others (i.e., social comparisons) (Festinger, 1954). This theory may explain why in the present study the participants' perceptions of popular girls' clothing behavior were closely related to their clothing purchase intentions and clothing behavior.

In a study by Owens and Duncan (2009), adolescent girls viewed popular girls as uniform in what they wear and the ways in which they present themselves. This uniformity of dress, usually fashionable clothing, seems to enable viewing popular girls as a distinct group and as having power over other students. A further link was made between popularity and being liked by boys. Results of the current study indicated that the participants perceived that popular girls mostly wear outfits with a sexy image. The results may imply that ninth grade girls perceive that popular girls use sexy outfits to attract boys in order to be liked by boys. Although adolescent girls have a general negative attitude toward popular girls, according to a study by Owens and Duncan, the current study showed that the participants' perceptions of popular girls' clothing behavior were closely related to their clothing purchase intentions for the sexy outfit image. This result suggests that adolescent girls may compare themselves to popular girls and also desire to wear outfits with a sexy image.

Recognizing the power of popular girls over adolescents' clothing behavior, hiring young girls with a popular image in clothing retail stores may be an effective strategy to present the products and stimulate adolescent customers' purchases. Popular girls as salespersons wearing the styles that a store is selling may serve as information sources for adolescent customers and an effective way to introduce, and promote new styles to these customers. This practice may help the retailer build its fashion image and attract adolescent customers; however, clothing retailers need to use care in their hiring strategies. Employees would need to be girls that adolescents believe meet their expectations of "being popular." To fully understand the adolescent girl target market, marketing research on this specific age group and a particular geographical region would be required. In addition, today's

adolescents are technologically savvy and like to shop online (Dotson & Hyatt, 2005). Grant and Stephen (2005) examined key communicating factors that influence adolescent girls' purchase decisions for fashion clothing and found that advertising media are influential. According to Fine (2002), media and online advertising are beneficial tools to communicate to young customers and assist them in finding garments that appear best on them. Advertisements that employ popular girls to promote and endorse products to their peers can be placed in various types of media such as the Internet (e.g., Face Book), magazines, television commercials or Apps (i.e., currently trendy computer applications). Popular girls do not have to be restricted to adolescents' immediate peers to exert influence on their clothing purchase decisions. Adolescents look to celebrities and favorite actors for ideas of what to wear (Danielsson, 2009). Celebrities and their visual fashion statements affect the fashion industry and also the dress of adolescent youth in America.

Parental Influence

The results of the current study showed that although parental influence was less than peers' influence, it was still an important factor in the prediction of ninth grade girls' clothing purchase intentions and clothing behavior. Among the six independent variables included in the study, parents' opinions concerning clothing behavior always emerged as an important predictor, except in the case of the springy outfit image. For the sexy outfit image, the perceptions of parents' opinions concerning clothing behavior was even more important than that of popular girls' clothing behavior. For the outfit with the sexy image, the perceptions of popular girls' clothing behavior was the third predictor of the participants' clothing purchase intentions, but it was not a predictor for their behavior of wearing a sexy outfit. The participants' perceptions of parents' opinions concerning clothing behavior, on the other hand, were consistently the second best predictor of clothing purchase intentions and clothing behavior for a sexy image outfit. These results suggest that although popular girls' clothing behavior influences adolescent girls' clothing purchase intentions for the sexy outfit image, it does not influence adolescent girls' clothing behavior (i.e., whether they will wear a sexy outfit).

The results of the present study revealed that the adolescent girls may have the desire to wear outfits with a sexy image like those of popular girls, but their parents' opinions play a

stronger role when deciding whether to actually wear sexy image outfits. The results of the current study support an argument in previous studies that when dealing with clothing consumption by adolescents, parents are one of the major sources of influence (Chen-Yu & Seock, 2002; Lachance et al., 2003; Martin & Bush, 2000; Simpson & Douglas, 1998; Wilson & MacGillivray, 1998) and play an important role in adolescents' consumer socialization (Ward, Robertson, Klees, & Gaitgnon, 1986). Consumer socialization theory explains the processes by which young persons acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace (Ward, 1974). Lachance et al. (2003) found that parents play an important role as consumer socialization agents in helping adolescents develop their perceptions toward clothing.

The results of the current study revealed that although friends and popular girls have strong influences on adolescent girls' purchase intentions and clothing behavior, parents also have a strong influence, especially over decisions pertaining to the sexy outfit image. Parents should not be discouraged by their children's responses and mistakenly think they have no influence over their clothing behavior. Black (2002) found that when it comes to moral issues like values, parents still remain more influential than peer groups. Biddle, Bank, and Marlin (1980) found that peer influence and parental influence manifest in different ways. Peer behaviors are more likely to affect adolescents than are parental behaviors, whereas parental norms are more likely to affect adolescents than are peer norms. Parents have had a longer time than peers to influence adolescents, and they have responsibility to represent the standards of the adult world. Parents should be encouraged by knowing that their adolescent children rely on them for core norms and values, such as choosing whether to display a sexy image through their clothing, and for understanding positive and negative consequences of their clothing decisions.

Several studies have shown that family communication serves an important role in the consumer socialization process (Bush, Smith, & Martin, 1999; Lachance, Legault, & Bujold, 2000). Parents should be proactive in maintaining communication with their adolescent children. Parents and adolescents may have differing views or perceptions of what is considered a rational purchase. Parents need to recognize that their disapproval alone fails to help adolescents avoid excessive buying behaviors (Chen-Yu & Seock, 2002). Parents could improve their children's adolescent experience by clearly communicating their values,

staying actively involved in their adolescent children's lives (e.g., becoming involved and knowing their adolescents' friends), and providing appropriate supervision to avoid risks of negative peer pressure. Parents could transmit knowledge needed to help their adolescent children make wise choices in clothing. This includes parents' influence on decisions pertaining to creating and maintaining peer and peer-group relationships.

A sexy outfit image has substantial implications because of the possible attraction from the opposite sex and from particular types of peer groups, which may lead to high social risks and attract unwanted sexual attention. Parents can help their adolescent children think about what image they wish to portray and the positive and negative repercussions of their clothing decisions through the image the clothing will portray. Through this process, parents can gain increased understanding of their adolescent children's desires, motivations in clothing, or social pressures being faced in school. Parents might consider working with the educators in their adolescent children's schools to understand the differing peer groups in the schools and the typical clothing and behavior of these peer groups, so that when communicating with their adolescent children, they are informed participants in the conversation and know how to enhance communication with their adolescent children. Parents should consider being positive by praising their adolescents' smart choices, encouraging activities approved by both the parents and adolescents (e.g., after-school clubs), and most importantly, providing further means of communication by spending time together.

Clothing Symbolism

Clothing is an important possession that contributes to adolescents' development of their self-concepts as they formulate or enhance the identity of the self (Daters, 1990; Eicher, Baizerman, & Michelman, 1991; Lachance et al., 2003). One purpose of this research was to examine the possible influence of clothing symbolism on adolescents' clothing purchase intentions and clothing behavior. I examined two types of clothing symbolism (i.e., actual self and clothing image congruity, ideal self and clothing image congruity). If there is a significant relationship between actual self and clothing image congruity and clothing purchase intentions or clothing behavior, then individuals will use clothing as a symbol of their actual self-concept to decide whether to purchase or wear particular clothing. If there is

a significant relationship between ideal self and clothing image congruity and clothing purchase intentions or clothing behavior, than individuals will use clothing as a symbol of their ideal self-concept to decide whether to purchase or wear particular clothing.

Results of the present study indicated no significant different between the mean scores for actual self-concept for the images of sexy, conservative, springy, and sporty. All the mean scores were more than 3 on a scale with a maximum possible score of five, indicating that participants perceived that the four images describe their actual self-concepts. The results of the repeat measures MANOVA showed no significant difference among the actual self-concepts for four images, indicating that the four images described the participants' actual self-concepts to a similar degree. The participants did not see themselves in one image more than any other examined image. For the ideal self-concepts, however, the results showed that the sexy image was significantly stronger than the other three examined images, indicating that the participants would most like to be sexy.

The results of the paired *t*-tests also showed that only the sexy image scores were significantly different between actual self-concept and ideal self-concept, indicating that the participants would like to be sexier than how they saw themselves. For the other three images (i.e., conservative, springy, and sporty), no significance was found, indicating that the participants desired (i.e., ideal self-concept) and perceived themselves (i.e., actual self-concept) in a similar manner with respect to these three images.

When all six independent variables included in the study were examined for being the best predictors of clothing purchase intentions or clothing behavior for each outfit image, the results showed that clothing symbolism played an important role in the outfits with sexy and springy images. For the outfit with a sexy image, one type of clothing symbolism (i.e., ideal self and clothing image congruity) was found to predict clothing purchase intentions, and both types of clothing symbolism (i.e., actual self and clothing image congruity and ideal self and clothing image congruity) were found to predict clothing behavior. For the outfit with a springy image, only one type of clothing symbolism (i.e., actual self and clothing image congruity) was found to predict clothing behavior. However, both types of clothing symbolism did not play a role in purchase intentions for the springy image outfit.

These results suggest that because the participants would like to be seen as sexy and the sexy image outfit matched their ideal self-concept, they would consider using a sexy

image outfit to achieve their ideal self-concepts by purchasing sexy clothing. In other words, using a sexy outfit to achieve a sexy image could be their motivation for buying sexy outfits. Both ideal self and clothing image congruity and actual self and clothing image congruity emerged as predictors of clothing behavior for the sexy outfit image, indicating the participants wear clothing with a sexy image not only to achieve the image they would like to have but also to convey the way they perceive themselves. Actual self and clothing image congruity also emerged as a predictor of clothing behavior for the springy outfit image, indicating the participants wear clothing with a springy image to convey the way they perceive themselves. These results were consistent with many previous studies, which also found significant relationships between clothing symbolism and clothing purchase intentions (Piacentini & Mailer, 2004; Solomon & Rabolt, 2004) and between clothing symbolism and clothing behavior (Elliott & Leonard, 2004; Erickson, 1983; Erickson & Sirgy, 1992; Piacentini & Mailer, 2004; Solomon & Rabolt, 2004).

The symbolic self-completion theory may explain the reason clothing symbolism influenced the clothing the participants in the present study purchased or wore. Wicklund and Gollwitzer (1982) proposed the symbolic self-completion theory, indicating that in order to feel a sense of completion, an individual's ideal self-definition and actual self-definition must be congruent, and he or she needs others to acknowledge his or her particular self-definition. To create congruity between the ideal self-definition and actual self-definition, individuals will engage in self-symbolizing behavior, such as purchasing, wearing, or displaying symbols with the expectation that others will recognize the symbols and comprehend their self-definitions. Several studies have addressed the effect of clothing symbolism on the clothing one purchases or wears in the context of the symbolic self-completion theory. Belk (1985) indicated that persons often use possessions with the intent of bridging the gap between their actual selves and ideal selves, to gain control over their self-images. Similarly, Heath and Scott (1998) indicated that many purchases by consumers are directly influenced by the image that they have of themselves. People may buy a product because, among other factors, they feel the product enhances their self-images. Researchers have shown that clothing items are often used as symbols in the process of symbolic self-completion (Belk, 1985; Solomon & Douglas, 1987).

The results of the current study showed that clothing symbolism was a predictor for clothing purchase intentions and clothing behavior for the sexy image outfit. Sexy is a strong image often portrayed in the media to adolescents. Fashion marketers frequently use provocative marketing campaigns featuring young adolescents. A frequent underlying message in the media is a link between sex appeal and success, or sex appeal and happiness. Empirical evidence suggests that television and other media significantly influence adolescents' attitudes and behaviors (Werner-Wilson, Fitzharris, & Morrissey, 2004). Adolescents are active consumers of messages broadcast on radio and television, printed in magazines, distributed on the Internet, and presented in video games. Influenced by the media, many adolescents consider sexy as trendy and attractive, and thus would use sexy clothing to attain this desired image. In an environment where much of the advertising aimed toward adolescents contains highly sexualized images, it may be difficult for adolescents to develop healthy attitudes towards sexuality. Unhealthy attitudes towards sexuality could have objectionable consequences such as clothing choices that attract unwanted attention. Sexting is one example of potentially damaging attention that adolescent girls may receive if they always wear clothes that portray them as having a sexy image. Sexting is a combination of the words "sex" and "texting," meaning the use of a cell phone or other similar electronic device to distribute pictures or video of sexually explicit images or to distribute messages of a sexually-charged nature (Crisis Intervention Center, n.d.). Because of her sexy image, an adolescent girl may become a target of sexting. Sexting may lead to serious and unintended consequences such as becoming a victim of enticement, blackmail, harassment, and exploitation by both adults and youth. It may negatively influence an adolescent's relationships with her friends and family and her image within the local community and school. In many situations, it may even cause legal problems and difficulties in obtaining jobs.

Ethics in marketing are particularly important because many strategies that marketers use affect society at large and its development (Lindquist & Sirgy, 2003). Although a single unethical action by a single marketer may be considered as one individual immoral act, its influence may be significant. The aggregate effects of the actions of many marketers can have long-term effects on society and on adolescents in particular. Government regulation controls only certain aspects of marketing activity and is effective only when the abuser is

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caught. Ethics can do much more by persuading marketers to be responsible for their own actions. To market to adolescents in an ethical manner, marketers have to start out with a product that enhances the well-being of adolescents. A good example of the application of ethical marketing to position a brand image is the Real Beauty campaign program of the Dove Company, which promotes girls' self-esteem. The Dove Campaign for Real Beauty creates a world where real beauty is a source of confidence. The company also relates social responsibility to self-esteem, by indicating that each time the customer buys a Dove product, she helps Dove's charitable programs (e.g., Girl Scouts, Boys and Girls Clubs of America). While marketing to the young adolescent, the Dove Company provides not only information about its products, but also literature concerning positive self-image for young adolescents and literature for parents to help their young adolescent children have positive self-images.

Clothing Involvement

Clothing is a relevant and important aspect of the lives of adolescents. Involvement is the amount of time, thought, energy, and other resources persons devote to the purchase process (McNamara, 2008), and a person's perceived relevance of an object based on inherent needs, values, and interests (Zaichkowsky, 1985). One purpose of this research was to examine the possible influence of clothing involvement on adolescents' clothing purchase intentions and clothing behavior. Results showed that the mean score for a factor of clothing involvement (i.e., clothing importance) was 4.06 on a scale with a maximum possible score of 5, indicating that the participants considered clothing was important to them. In addition, clothing importance was a predictor of clothing purchase intentions and clothing behavior for the sexy outfit image. These results showed the participants' consideration of clothing as important on clothing importance made them likely to purchase and wear the sexy outfit image.

The results on clothing importance are consistent with many previous studies, that also showed clothing to be important to adolescents (Alhabeeb, 1996; Haytko & Baker, 2004; Vieria, 2009; Zollo, 1995). Clothing elicits a high level of product involvement (Engel, Blackwell, & Miniard; 1986; Francis, 1992; Oh & Jasper, 2006). The two sets of researchers just cited emphasize that clothing is a high-involvement product, and thus consumers (e.g.,

adolescents) place high levels of importance on whether to buy (i.e., clothing purchase intentions) or to wear (i.e., clothing behavior) specific garments. A possible reason that adolescent girls have high levels of clothing involvement and consider clothing as important is that adolescents in the U.S. have grown up in a consumer-oriented society in which consumption has become a leisure-time activity (Bush, Martin, & Bush, 2004; Syrett & Lammiman, 2004). Going to the mall to shop for clothes is a top activity for adolescents (Setlow, 2001). Apparel is the most important product category for female adolescents (Zollo, 1995). According to Alhabeeb (1996), more than one fourth of adolescents' income is spent on clothing and personal care.

Gordon, McKeage, and Fox (1998) found that relationship marketing tactics may reduce the economic and/or social risk perceived by the consumer who purchases high-involvement products. Because the results of the current study showed that many adolescent girls considered clothing was important, relationship marketing strategies may be a good approach to effectively promote clothing to adolescent girls. For example, when an adolescent girl purchases clothing to wear at an important event, she may feel comfortable with a salesperson to whom she can easily relate and whom she regards as a friend. If the adolescent girl establishes a strong relationship with the salesperson and retailer, she has the prospect of becoming a lifetime and loyal customer**.** Gordon et al. (1998) also found that the effectiveness of relationship marketing effectiveness may be influenced by the number of options available to highly involved consumers. When an elevated number of options is available to the highly involved consumer, personalization is key. Because an overwhelming number of similar clothing products may be available in the marketplace, a company must differentiate itself from competitors. Marketers may encourage employees to learn repeat customers' names and call them by name, hold private after-hours sales just for them, or notify them if a new product arrives that they might desire. Furthermore, Gordon et al. (1998) found that when many options are available for a similar product, intangible attributes, such as the store environment and the image a store, become important to attract the highly involved consumer because these intangible attributes can make a store or brand unique. For example, retailers in the adolescent clothing market could design a store environment that is exiting and inviting. Retailers should develop their stores as places where adolescent girls

could meet their friends and where employees can relate to adolescent girls to create a shopping experience that the girls enjoy and would entice them to return to the store.

Results of the present study showed that friends' clothing behavior, popular girls' clothing behavior, and parents' opinions concerning clothing behavior has higher means scores with respect to the sporty image outfit than with respect to the other examined three outfit images (i.e., sexy, conservative, springy). These results indicate that the ninth grade girls in the study perceived that their friends and popular girls more often wore outfits with a sporty image outfits with three other examined images when hanging out with friends and that the girls in the study also perceived that their parents preferred that they wear outfits with a sporty image rather than outfit with the three other examined images. The mean scores for clothing purchase intentions and clothing behavior further revealed that ninth grade girls in the study would more often purchase and wear the sporty outfit than the other three examined outfits. These findings suggest that increasing the variety of available clothing styles with a sporty image fulfill ninth grade girls' clothing needs, and thus may be an effective approach for apparel brand companies to attract customers in this segment.

Conclusions of the Study

The purpose of this research is to examine the relationship between each of three independent variables (i.e., reference groups, clothing symbolism, and clothing involvement) and adolescents' clothing purchase intentions and clothing behavior, and whether the three independent variables are predictors of adolescents' clothing purchase intentions and clothing behavior. When all six independent variables included in the study were examined for their ability to predict clothing purchase intentions and clothing behavior, perceptions of friends' clothing behavior consistently emerged as the best predictor for all four outfit images; perceptions of popular girls' clothing behavior consistently emerged as the second or third best predictor for all four outfit images; and parents' opinions concerning clothing behavior was a significant predictor for all outfit images, except for the springy outfit image. In for the sexy image outfit, parents' opinions concerning clothing behavior were consistently the second best predictor of clothing purchase intentions and clothing behavior. These results suggest the powerful influence of friends and popular girls on ninth grade girls' clothing

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purchase intentions and clothing behavior. In addition, they suggest that although parental influence is less than peers' influence, it is still important in predicting ninth grade girls' clothing purchase intentions and clothing behavior.

This study also provides important information about the relationship between clothing symbolism and the likelihood that adolescent girls will purchase and wear particular outfits. The results showed that among the four outfit images included in the study, the participants would most like to be sexy and would like to be sexier than they actually perceive themselves. The results suggest that using a sexy outfit to achieve a sexy image (i.e., ideal self-concept) could be ninth grade girls' motivation for buying sexy outfits. In addition, portrayal of a sexy image (i.e., actual self-concept) and achievement of a sexy image (i.e., ideal self-concept) could be motivation for wearing sexy outfits. For the springy image, actual self and clothing image congruity was significantly related to adolescent girls' clothing behavior. Similar to the sexy image, portrayal of a springy image (i.e., actual self-concept) could be incentive for wearing springy outfits. However, both actual self and clothing image congruity and ideal self and clothing image congruity were not related to adolescent girls' clothing purchase intentions. When the participants purchased outfits with a springy image, they did not consider utilizing a springy outfit to portray or achieve a springy image. For the conservative and sporty images, the results showed that portraying actual self-concept or achieving deal self-concept were not motivations for purchasing or wearing outfits with conservative or sporty images.

Lastly, this study provides insight into the relationship between adolescent girls' clothing involvement and the likelihood that adolescent girls will purchase and wear particular outfits. Participants considered clothing was very important to them, and clothing importance was a predictor of clothing purchase intentions and clothing behavior for the sexy outfit image. In other words, participants who considered clothing important were likely to purchase and wear the sexy image outfit.

Limitations of the Study and Recommendations for Future Research

In the current study, the participants were adolescent girls in the ninth grade because the ninth grade is the lowest grade in most high schools and students transitioning from eighth to ninth grade often face pressures in developing new friends and fitting into new social environments. The age of students in the ninth grade is a critical time for adolescents in developing their self-concept identities (Richman, Clark, & Brown, 1985). The self-concept changes over time as it develops through interpersonal communication, new experiences and exposures to new environments (Erickson, 1983). It would be beneficial to conduct longitudinal studies explore changes from early to middle to late adolescence in individuals' actual and ideal self-concepts and their perceptions of reference groups, clothing symbolism, and clothing involvement.

The participants of the current study were limited to ninth grade female adolescents living in central Virginia. The participants' demographic characteristics, such as social status and race, were limited to those in this geographical area. The sampling method was convenience sampling, not random selection. Because the sample was not randomly selected, the results of the study cannot be generalized to the larger population of ninth grade girls. Succeeding studies are to verify the findings of this research. In addition, because the current study was limited to adolescent girls and their clothing behavior, adolescent boys' perceptions of reference groups, clothing symbolism, clothing involvement, or different outfit images were not explored. It would be beneficial to understand adolescent boys' perceptions of reference groups, clothing symbolism, and clothing involvement, and how these variables are related to their clothing purchase intentions and clothing behavior. A comparison study between adolescent girls and adolescent boys may be conducted to understand the similarities and differences in their purchase and clothing behaviors.

Although the methods and processes for selecting outfit illustrations and adjectives may be used in future studies, the constant changes in fashion and meanings of terminology suggest that the outfit illustrations and adjectives used in the questionnaire may refer to only a short period of time and thus may not be applicable in future research on clothing image and self-image. Lack of applicability in future research may make it difficult to assess the reliability of the measures. In addition, only four outfit images were included in the current

study. Other images that the research participants might have used to describe themselves (i.e., actual self-concept) or their desired images (i.e., ideal self-concept) may not have been included in the study. Clothing purchase intentions and clothing behavior may differ for outfits with types of images besides those indicated in the study; and therefore, future research is needed to identify other types of images and evaluate adolescent girls' use of them to describe themselves or their desired images of themselves. Furthermore, even though participants indicated that the images did describe them, they may have disliked the style options available to them in the study. In the first preliminary focus group, the participants were asked to identify the presented outfits they usually wore. Researchers in future studies could ask participants to identify the presented outfits that they not only usually wear, but also would like to wear. In the questionnaire, a question that measures participants' relative preferences for each presented outfit may provide additional information to help understand the relationship between clothing symbolism and clothing purchase intentions and the relationship between clothing symbolism and clothing behavior. Moreover, only garments were considered when creating the four outfit images in the current study. All other accessories or footwear were controlled to be consistent in the four outfits. However, the total outfit will be influenced by all the items an individual wears and carries. Researchers in future studies may consider including accessories and footwear to create various outfit images.

In the current study, when measuring the participants' clothing behavior, the survey questions specified clothing behavior within the context of "hanging out with friends." The reason for specifying the clothing behavior situation was to avoid the possibility of participants answering questions relative to situations unknown to the researcher or to situations in which they would not wear an illustrated outfit for the purpose of reflecting the actual self or of enhancing the ideal self, such as required use of a "sporty" uniform in physical education classes. However, because the questions were specifically for the situation of "hanging out with friends," this particular situation might cause the perceptions of friends' clothing behavior to become a more significant variable related to the participants' clothing behavior. Different situations, for example, in the context of attending a family function such as a family reunion, the perceptions of parents' opinions concerning clothing behavior may

become greater. Researchers in future studies may address different situations to understand how adolescents' clothing behavior varies in different situations.

When all six independent variables included in the study were examined for relationships with clothing purchase intentions and with clothing behavior, for the four different outfits, the values of R square for the four different outfits ranged from .40 to .60 and .31 to .57, respectively, indicating that other variables, not included in the equation, also contributed to the results. For example, if the participants did not have the economic means to purchase the outfits or if they already owned many outfits with the images included in the current study, they might have lower purchase intentions. Additionally, the participants might be more likely to wear the outfits if they were appropriate for the season or weather conditions when the data collection was conducted. The data collection of the current study was performed in the fall, which might be why the participants indicated that they would wear the springy outfit the least. Furthermore, even though participants indicated that the images included in the study did describe them, some participants may have disliked some of the style options available to them in the study. Therefore, participants' preference toward the outfit might influence their responses to whether they would wear the outfit image. Researchers in future research may want to extend the current study and include additional variables to better predict adolescent girls' purchase intentions and clothing behavior.

Economic status may influence adolescents' ability to buy particular garments or have particular garments to wear. Demographic characteristics such as economic status, could be investigated for their relationship to adolescents' clothing purchase intentions and clothing behavior. Parents' economic status or adolescents' income or lack of income from part time jobs might influence research participants' discretionary incomes for purchasing products.

Clothing is consumed conspicuously by adolescents (Piacentini & Mailer, 2004). A study similar to the present one may include items that have become status symbols (i.e., are used for conspicuous consumption) for adolescents; for example, products such as electronics, cell phones, or I pads. These products are also often high-involvement products for adolescents. By using the framework of the current study with another high-involvement product and a similar sample, the applicability of the framework could be further investigated.

Consumer behavior analysts are increasingly required to understand purchase and consumption decisions on a global basis (Blackwell, Miniard, & Engel, 2001). The current study could be extended to a cross-cultural comparison study, of similarities and differences in 9th grade adolescent girls' perceptions of friends' and popular girls' clothing behavior, parents' opinions concerning clothing behavior, actual and ideal self-concepts, and clothing involvement and the influences of these variables on the girls' clothing purchase intentions and clothing behavior in order to understand market segments both across national boundaries and between groups within a society. For example, a study comparing the adolescent girls in the U.S. and in another country or a study comparing Caucasian and African American adolescent girls could augment understanding of influences on clothing purchase intentions and clothing behavior that are common across cultures or unique to a particular culture. The outcomes of these studies would be helpful in deciding elements of marketing programs that could be standardized in multiple nations/sub-cultures or that must be localized and confined to specific nations/sub-cultures. In other words, similar marketing strategies could be applied across several nations or cultures if similarities between the nations/sub-cultures were found; on the other hand, if significant differences were found, marketers may need to develop strategies to fulfill specific needs of consumers in each nation/sub-culture.

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APPENDIXES

Appendix A.
Final Questionnaire

Appendix B.
Frequencies of Repeated Adjectives

Appendix C.
Approved IRB

Appendix A

Final Questionnaire

Part I: Some Questions about You and What You Think about Clothing

The questions below have no right or wrong answers. The best answers are what you truly believe. Truth is most important. Please answer <u>all</u> questions. For each question, please circle <u>one</u> answer that is truly what you think.

I. What you think about clothing

	Strongly Disagree		Neutral		Strongly Agree
There are big differences among the various brands of clothing…1		2	3	4	5
I prefer a specific brand of clothes………………………………… 1		2	3	4	5
I like to read articles about clothing…………………….…… 1		2	3	4	5
Clothing is important to me………………………………………1		2	3	4	5
Clothing is boring………………………………………………… 1		2	3	4	5
The clothes I wear express who I am………………………… 1		2	3	4	5
Clothing doesn't matter to me………………………………… 1		2	3	4	5
Clothing is appealing…………………………………………..1		2	3	4	5
The clothing a person wears tells me about that person…………1		2	3	4	5

II. How you actually see yourself

These questions ask how you ***actually*** see yourself, not how you would like to see yourself.

	Strongly Disagree		Neutral			Strongly Agree
I am sporty…………………1		2	3	4		5
I am conservative ………… 1		2	3	4		5
I am sexy………………… 1		2	3	4		5
I am springy……................1		2	3	4		5

III. How you would like to be

These questions ask how you ***would like*** to be, not how you actually see yourself.

	Strongly Disagree		Neutral		Strongly Agree
I would like to be sporty…………………1		2	3	4	5
I would like to be conservative ………… 1		2	3	4	5
I would like to be sexy………………… 1		2	3	4	5
I would like to be springy……….............1		2	3	4	5

Part II

I. What you think about the outfits in the pictures

	Strongly Disagree		Neutral		Strongly Agree
Outfit **1** is sporty…………..……1	2	3	4	5
Outfit **1** is conservative…....…… 1	2	3	4	5
Outfit **1** is sexy...…………….… 1	2	3	4	5
Outfit **1** is springy...........……..1	2	3	4	5
Outfit **2** is sporty…………..……1	2	3	4	5
Outfit **2** is conservative…....…… 1	2	3	4	5
Outfit **2** is sexy...…………….… 1	2	3	4	5
Outfit **2** is springy...........……..1	2	3	4	5
Outfit **3** is sporty…………..……1	2	3	4	5
Outfit **3** is conservative…....…… 1	2	3	4	5
Outfit **3** is sexy...…………….… 1	2	3	4	5
Outfit **3** is springy...........……..1	2	3	4	5
Outfit **4** is sporty…………..……1	2	3	4	5
Outfit **4** is conservative…....…… 1	2	3	4	5
Outfit **4** is sexy...…………….… 1	2	3	4	5
Outfit **4** is springy...........……1	2	3	4	5

II. Your clothes and what clothes you would purchase

	Strongly Disagree		Neutral		Strongly Agree
Outfit **1** is like what I usually wear **when hanging out with friends**….….1	2	3	4	5
Outfit **2** is like what I usually wear when hanging out with friends ….…..1	2	3	4	5
Outfit **3** is like what I usually wear when hanging out with friends …….. 1	2	3	4	5
Outfit **4** is like what I usually wear when hanging out with friends …….. 1	2	3	4	5

	Never		Sometimes		Very Often
How often do you wear clothes like Outfit **1 when hanging out with friends**?.....1	2	3	4	5
How often do you wear clothes like Outfit **2** when hanging out with friends?........1	2	3	4	5
How often do you wear clothes like Outfit **3** when hanging out with friends?........1	2	3	4	5
How often do you wear clothes like Outfit **4** when hanging out with friends?........1	2	3	4	5

	Not At All Similar		Somewhat Similar		Very Similar
How similar is Outfit **1** to what you usually wear **when hanging out with friends**? 1	2	3	4	5
How similar is Outfit **2** to what you usually wear when hanging out with friends?....1	2	3	4	5
How similar is Outfit **3** to what you usually wear when hanging out with friends?....1	2	3	4	5
How similar is Outfit **4** to what you usually wear when hanging out with friends?....1	2	3	4	5

	Very Unlikely		Neutral		Very Likely
How likely would you be to purchase Outfit **1 for hanging out with friends**?......1	2	3	4	5
How likely would you be to purchase Outfit **2** for hanging out with friends?.......1	2	3	4	5
How likely would you be to purchase Outfit **3** for hanging out with friends?.......1	2	3	4	5
How likely would you be to purchase Outfit **4** for hanging out with friends?.......1	2	3	4	5

III. What my friends and popular girls would wear

	Strongly Disagree		Neutral		Strongly Agree
My friends would wear Outfit **1** …………………1	2	3	4	5
My friends would wear Outfit **2** …………………1	2	3	4	5
My friends would wear Outfit **3** …………………1	2	3	4	5
My friends would wear Outfit **4** …………………1	2	3	4	5
Popular girls would wear Outfit **1** ……………… 1	2	3	4	5
Popular girls would wear Outfit **2** ……………… 1	2	3	4	5
Popular girls would wear Outfit **3** ……………… 1	2	3	4	5
Popular girls would wear Outfit **4** ……………… 1	2	3	4	5

IV. Opinions of parent(s) or adult(s) in your household

These questions ask what you think are the opinions of your parent(s) or other adult(s) in your household. **If your parent(s) or other adult(s) in your household do not give you their opinions on clothing they would like you to wear or if you do not know their opinions about certain types of outfits, please circle 3 (neutral) as your answer.**

	Strongly Disagree		Neutral		Strongly Agree
My parent(s) would like me to wear Outfit **1** ……………1	2	3	4	5
My parent(s) would like me to wear Outfit **2** ……………1	2	3	4	5
My parent(s) would like me to wear Outfit **3** ……………1	2	3	4	5
My parent(s) would like me to wear Outfit **4** ……………1	2	3	4	5

V. More about you

My age in years

____13   ____15

____14   ____16

My race

___White

___Black or African American

___Hispanic

___Asian or Pacific Islander

___American Indian

___Other_____

Thank you for your participation!!!

Outfit 1

Outfit 2

Outfit 3
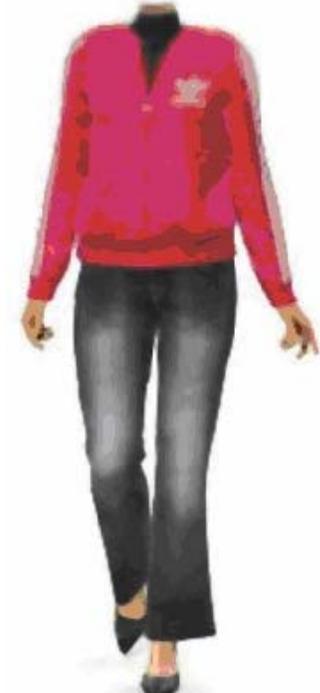
Outfit 4

Appendix B

Frequencies of Repeated Adjectives

In the second focus group, 15 ninth grade girls were asked to select one word from a list of 19 adjectives to describe each of 21 outfits. Each number in parentheses after the adjective listed below is the frequency with which the girls used the adjective to describe an indicated outfit.

The 19 adjectives are adorable, carefree, classy, conservative, cool, cute, hot, lovely, mature, modern, nice, popular, preppy, pretty, relaxed, sexy, sporty, springy, and sweet.

Outfit A   mature (4), classy (3), cute (2), hot (2), lovely (1), conservative (1), nice (1), sweet (1)

Outfit B   conservative (5), mature (5), sporty (2), modern (1), cool (1), classy (1)

Outfit C   springy (5), cute (4), nice (2), carefree (2), preppy (1), classy (1), sweet (1)

Outfit D   classy (4), nice (4), carefree (2), sweet (1), mature (1), lovely (1), cute (1)

Outfit E   cute (3), carefree (2), springy (2), sweet (1), adorable (1), pretty (1), modern (1), lovely (1), classy (1), sexy (1), cool (1)

Outfit F   conservative (6), sporty (2), mature (2), adorable (1), cool (1), modern (1), sweet (1), nice (1), carefree (1)

Outfit G   preppy (2), nice (2), carefree (2), classy (1), lovely (1), springy (1), pretty (1)

Outfit H   sporty (4), springy (3), preppy (2), carefree (1), pretty (1), hot (1), popular (1), modern (1), sexy (1)

Outfit I   nice (3), pretty (3), conservative (2), classy (2), cute (1), modern (1), lovely (1), springy (1), adorable (1)

Outfit J   springy (4), sweet (2), mature (2), modern (1), pretty (1), preppy (1), cool (1), nice (1), adorable (1)

Outfit K   mature (3), casual (2), carefree (2), modern (1), classy (1), adorable (1), sporty (1), nice (1), lovely (1), hot (1), conservative (1)

Outfit L   hot (4), sexy (3), carefree (2), sporty (2), modern (1), pretty (1), springy (1), cool (1)

Outfit M   sexy (4), popular (2), hot (2), nice (1), sweet (1), pretty (1), cute (1), mature (1)

Outfit N   pretty (3), cool (2), sporty (2), sexy (2), nice (2), lovely (1), conservative (1), mature (1), classy (1), preppy (1), modern (1)

Outfit O   conservative (4), classy (2), nice (2), cute (1), cool (1), modern (1), carefree (1), mature (1), preppy (1), lovely (1)

Outfit P   preppy (5), sporty (3), cool (1), pretty (1), hot (1), cute (1), popular (1), carefree (1), sexy(1), classy (1)

Outfit Q   sporty (10), modern (2), sweet (1), mature (1), nice (1)

Outfit R   sexy (9), classy (2), cute (1), pretty (1), hot (1), cool (1)

Outfit S   preppy (3), nice (2), conservative (2), classy (2), pretty (1), lovely (1), mature (1), cute (1), modern (1), carefree (1)

Outfit T   mature (3), conservative (2), lovely (2), modern (2), pretty (1), classy (1), carefree (1), cool (1)

Outfit U   hot (4), sexy (2), pretty (2), mature (1), adorable (1), cool (1), pretty (1), popular (1)

Appendix C

Approved IRB

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Institutional Review Board

Dr. David M. Moore
IRB (Human Subjects)Chair
Assistant Vice President for Research Compliance
CVM Phase II- Duckpond Dr., Blacksburg, VA 24061-0442
Office: 540/231-4991; FAX: 540/231-6033
email: moored@vt.edu

DATE: June 16, 2004

MEMORANDUM

TO: Hsiu I. Chen-Yu Apparel, Housing & Resource Mgt 0410
           Anne Dillard AHRM

FROM: David Moore

SUBJECT: **IRB Expedited Approval:**"The Role of Clothing Involvement, Reference
           Groups, and Congruity/Incongruity between Clothing Image and Self-Concept on
           Female Adolescents' Clothing Behavior and Purchase Intention" IRB # 04-293

This memo is regarding the above-mentioned protocol. The proposed research is eligible for
expedited review according to the specifications authorized by 45 CFR 46.110 and 21 CFR 56.110.
As Chair of the Virginia Tech Institutional Review Board, I have granted approval to the study for a
period of 12 months, effective June 15, 2004.

cc: File