Extension of the tripartite model of body influence: the role of materialism on body satisfaction and fashion involvement

Srikant Manchiraju
Iowa State University

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Extension of the tripartite model of body influence: The role of materialism on body satisfaction and fashion involvement

by

Srikant Manchiraju

A dissertation submitted to the graduate faculty in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY

Major: Apparel, Merchandising and Design

Program of Study Committee:

Mary Lynn Damhorst, Major Professor
Ann Marie Fiore
Elena Karpova
Daniel Russell
Zlatan Krizan

Iowa State University
Ames, Iowa
2015

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Dedication

I wish to dedicate my dissertation to the most loving parents—Radha and Papa Rao. Your endless encouragement, love, and support helped me to complete my doctoral degree.

Thank you very much for believing in me!
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ABSTRACT

Modern consumer culture is dominated by two ideals—the body perfect and the material good life. Mass media is replete with depictions of these two ideals (Dittmar, 2008), often portrayed in conjunction (Ashikali & Dittmar, 2012). Only in recent years, the role of these two cultural ideals’ influence on individuals has been explored. For example, it was found that internalization (i.e., cognitively buying into the belief) of the body perfect and the material good life ideals are detrimental to individuals’ well-being. For example, Gudnadottir and Gardarsdottir (2014) found a positive relationship between internalization of the two cultural ideals and disturbing body image behavior (e.g., excessive dieting) among Icelandic males and females. Therefore, the present study explored the influence of the body perfect and material good life ideals on consumption behaviors—specifically, fashion consumption behaviors. Additionally, the study also examined potential sociocultural antecedents that may contribute to internalization of these cultural ideals among individuals.

Based on literature related to body satisfaction, materialism, and fashion involvement, a hypothesized research model was proposed, consisting of 10 hypotheses. To test the model, data were collected from over 600 U.S. male and female adult participants via Amazon Mechanical Turk (AMT). SEM was performed to test the hypothesized research model. In total, nine of the 10 hypotheses were supported by the collected data. Also, a pretest was conducted in order to reduce number of survey items. For the pretest, over 170 U.S. male and female adult participants were recruited via AMT.

Findings from the present study revealed that the proposed hypothesized research model is valid across gender. It also revealed that parents, peers, and mass media have contributed towards cultural ideals internalization, which, in turn, influenced an individual’s level of body satisfaction via two mediating mechanisms—appearance internalization and appearance
comparison. Furthermore, a positive relationship between an individual’s level of body satisfaction and fashion involvement was found. Some nuances related to gender differences were identified.

The present study is the first of its kind to explore the role of cultural ideals internalization on individuals’ appearance consumption behaviors. A widely used theoretical model in body image literature was incorporated—the Tripartite Influence Model (TIM) to understand consumption issue beyond eating pathologies. The TIM was extended to include the materialism construct. In sum, the present study’s model explained about 20% of the variance for the terminal construct (i.e., fashion involvement) \((p < 0.0001)\). Additionally, implications, limitations, and future directions based on the present study and its findings are discussed. For example, the findings of the present study will be useful for conducting social marketing campaigns.
CHAPTER 1. INTRODUCTION

United States consumer culture currently is characterized by two predominant ideals—the “body perfect” and the “material good life” (Ashikali & Dittmar, 2012). Both ideals and their impacts have received separate, but ample, attention in divergent literatures. To date, only limited research (Ashikali & Dittmar, 2012; Bell, 2011; Gudnadottir & Gardarsdottir, 2014) has focused on the relationship between body image and materialism. However, in recent years, it has been proposed these ideals are potentially related and can affect an individual (Dittmar, 2008). Indeed, the body is a site for displaying material possessions and reflecting participation in the “good” life (Veblen, 1899). To examine the possible body perfect/materialism connection, the purpose of the present study is to explore the relationships among body esteem, materialism, body ideals, and fashion involvement, potentially linking material and body concerns to consumption behaviors. Furthermore, this study explores formative influences from a sociocultural perspective on the relationships among body esteem, materialism, and fashion involvement.

The Body Perfect

The body perfect ideal refers to prevailing gender-specific, body shape ideals; in general, women want to be thinner and men want to be more muscular (Gudnadottir & Gardnasdottir, 2014; McCreary & Sasse, 2000; Parent, 2011). These body perfect ideals are often referred to as the “thin-ideal” for women and the “muscular-ideal” for men (Dittmar, 2008). That body perfect ideals are a source of body dissatisfaction has been generally contended (Bell, 2011; Corson & Andersen, 2002; Gudnadottir & Gardnasdottir, 2014; Hargreaves & Tiggemann, 2004; Mishkind, Rodin, Silberstein, & Striegel-Moore, 1986). Body dissatisfaction refers to “a person’s negative thoughts and feelings about his or her body” (Grogan, 2008, p. 4). In the past, research has indicated that body dissatisfaction is a common problem among young women. Evidence is
demonstrating also that body dissatisfaction is an increasing problem among young men (Cash, 2002; Gudnadottir & Gardnasdottir, 2014; Parent, 2011). Body dissatisfaction can have several negative consequences, which may evolve into pathological issues, such as bulimia nervosa, unhealthy exercising behaviors, and low self-esteem (Gudnadottir & Gardnasdottir, 2014; Hargreaves & Tiggemann, 2004; Olivardia, 2001).

Body image can be conceptualized in several ways, and is generally assumed to be a multi-faceted or umbrella component of self-concept. Body image includes satisfaction with the body, feelings of esteem and degree of liking of the body, comparisons with ideals, and a number of other constructs. Body image refers to “how people think, feel, and behave with regard to their own physical attributes” (Muth & Cash, 1997, p. 1438). The narrower, but still multi-dimensional, concept of body satisfaction has received the greatest attention within body image literature (Feingold & Mazzella, 1998). In general, body satisfaction refers to “an individual’s evaluation of his or her physical size or shape” (Jones, 2011, p. 110). Likewise, body esteem refers to one’s generalized like or dislike towards one’s body (Rosa, Garbarino, & Malter, 2006). Also, the frequently used term, body cathexis, is defined as the “degree of satisfaction or dissatisfaction with the various parts or processes of the body” (Shim et al., 1991, p. 35). Nevertheless, it is worth noting that body satisfaction is a complex construct, which entails various dimensions, such as one’s perceived physical attractiveness and contingent self-esteem (Feingold & Mazella, 1998).

Research has consistently demonstrated that perpetuation of body perfect ideals is largely due to three sources—family, peers, and mass media (Clark & Tiggemann, 2006; Hargreaves & Tiggemann, 2004; Karazsia & Crowther, 2009; Keery, van den Berg, & Thompson, 2004; Menzel, Sperry, Small, & Thompson, 2011; Ricciardelli, McCabe, Holt, & Finemore, 2003;
Rodgers, Chabrol, & Paxton, 2011; Rogers, Paxton, & Chabrol, 2009; Shroff & Thompson, 2006; Smolak, Murnen, & Thompson, 2005; Tylka, 2011; van den Berg et al., 2007; Yamamiya, Shroff, & Thompson, 2008). The perpetuation of body perfect ideals via these three sources has been empirically established among boys and men (Chen, Gao, & Jackson, 2007; Karazsia & Crowther, 2009; van den Berg et al., 2007) and girls and women (Keery et al., 2004; Shroff & Thompson, 2006; Rodgers et al., 2011). For example, among girls, mass media images and toy dolls with unrealistically thin bodies are seen to play a central role to perpetuate and maintain the thin-ideal at very early ages in life (Dittmar, Halliwell, & Ive, 2006; Grogan, 2008; Gudnadottir & Gardnasdottir, 2014). Likewise, unusually muscular action toys are marketed to young boys (Pope, Olivardia, Gruber, & Borowiecki, 1999). Furthermore, empirical studies have demonstrated that the perpetuation of body perfect ideals is also applicable in a variety of cultural contexts such as Australia and France (Rodgers et al., 2011), China (Chen et al., 2007), and Japan (Yamamiya et al., 2008). However, the body perfect thin ideal is more rigid and dogmatic for women, compared to men, who tend to have more heterogeneous and flexible ideals (Gudnadottir & Gardnasdottir, 2014).

It has been suggested that constant exposure to body ideals leads to internalization of body perfect ideals. Internalization of body perfect ideals refers to personally held beliefs about standards of beauty (Gudnadottir & Gardarsdottir, 2014; see also appearance schematics, Cash & Labarge, 1996). Thus, individuals who have internalized culturally-endorsed and strongly emphasized body-shape ideals are more likely to experience decrement in body satisfaction (Shroff & Thompson, 2006; Thompson & Stice, 2001).
The Body Perfect and the Material Good Life

The material good life ideal refers to emphasis on affluence and luxurious possessions and lifestyles, which, in essence, define materialistic values (Dittmar, 2008; Kasser & Kanner, 2004). Also, like the body perfect ideal, research has demonstrated negative consequences of excessive emphasis on the material good life. For instance, materialistic values are negatively related to varied personal, social, and environmental well-being indicators (for in-depth discussions see Ghadrian, 2010; Kasser, 2002; Manchiraju, 2013). According to Dittmar (2008), both materialistic and body perfect ideals have a common theme—they are related to external contingencies (or goals), either aspiring to achieve financial success or to attain an appealing appearance (Gudnadottir & Gardarsdottir, 2014). Also, a limited number of studies (e.g., Ashikali & Dittmar, 2012) found that these two cultural ideals were correlated. In short, the degree of internalization of these two cultural ideals by an individual has negative consequences, including excessive body shaping behaviors, such as eating disorders and engaging in excessive muscle building (Gudnadottir & Gardarsdottir, 2014). Likewise, internalization of the material good life has been associated with a host of negative outcomes, which include compulsive buying (Dittmar, 2005), lower self-esteem (Yurchisin & Johnson, 2004), drug abuse (Kasser, 2002), and decrement in life satisfaction and individual happiness (Dittmar, Bond, Hurst, & Kasser, 2014; Wright & Larson, 2014; for a review see Kasser 2002; Manchiraju, 2013).

Fashion Involvement, Body Ideal, and Material Good Life Connections

In this study I propose that relationships among body perfect and materialistic cultural ideals internalization and fashion involvement should be explored. Fashion involvement refers to the extent of interest in and time, money, and attention spent on fashion product categories such as apparel (Park, Kim, & Forney, 2006). Several studies have noted negative consequences of
excessive fashion involvement, such as compulsive buying behavior (Johnson & Attmann, 2009; Park & Burns, 2005; Yurchisin & Johnson, 2004), hoarding behavior (Byun & Sternquist, 2011), and negative mood and dissatisfaction (Tiggemann, Polivy, & Hargreaves, 2009). Studies have demonstrated that fashion involvement is positively related to the material good life ideal (i.e., materialism) (e.g., Browne & Kaldenberg, 1997; Choo, Hong, & Moon, 2010; Jina, 2010; Lertwannawit & Mandhachitara, 2012; Muzinich, Pecotich, & Putrevu, 2003; O’Cass, 2000, 2001, 2004; Ogle, Hyllegard, Yan, & Littrell, 2014; Park, Burns, & Rabolt, 2007; Podoshen, Li, & Zhang, 2011; Vieira, 2009) and the body perfect ideal (Apeagyei, 2008; Banister & Hogg, 2004; Khare, Mishra, & Parveen, 2012; Rathnayake, 2011; Shim, Kotsiopulous, & Knoll, 1991).

For example, O’Cass (2001) demonstrated that an individual’s level of materialism had a significant, positive effect on respondents’ levels of involvement in fashion clothing.

Also, recent studies (e.g., Gudnadottir & Gardarsdottir, 2014) have found a positive correlation between the material good life and body perfect ideals. The connection between these two cultural ideals is perhaps obvious (Bell, 2011). For example, in advertising (including ads of fashion products), unrealistically attractive people are seen to experience happiness, love, or success while using particular material good(s) (Bell, 2011; Gudnadottir & Gardarsdottir, 2014). Gudnadottir and Gardarsdottir noted that “media and advertising manage to create a seamless association between people with the ‘right’ appearance and ‘right’ material goods” (p. 2). Kasser and Kanner (2004) proposed that such promotion can feed a materialistic value orientation. Furthermore, materialistic individuals might view the body perfect ideal as a commodity that can be acquired through transactional processes (e.g., dieting) (Bartky, 1982; Bell, 2011).
To date, the relationships among body image, materialism, and fashion involvement have not been explored together. Only limited studies (e.g., Ashikali & Dittmar, 2012) have explored the relationship between the body perfect ideal and the material good life ideal. Ashikali and Dittmar demonstrated through correlational and experimental design studies that these two ideals are related. Similarly, Henderson-King and Brooks (2009) showed that internalization of sociocultural standards of appearance and materialism predicted greater acceptance of and desire for cosmetic surgery, reflecting pursuit of the perfected body. Gudnadottir and Gardarsdottir (2014) demonstrated that emphasis on these two ideals by an individual leads to excessive body shaping behaviors (e.g., dieting). However, literature linking these two ideals with fashion involvement is limited. There is reasonable evidence, nevertheless, that these two ideals may be linked with fashion involvement.

**Purpose of the Study**

The purpose of the present study is to extend and integrate previous research to offer a greater understanding of the relationships among (1) body esteem, (2) materialism, and (3) fashion involvement within the contexts of sociocultural influences. First, as noted earlier, only a few studies have explored the relationship between the body perfect ideal and the material good life ideal. These studies are conducted, based on Dittmar’s (2008) Consumer Culture Impact Model, which postulates that the two ideals play a central role in contemporary consumer culture. However, the relationship between these two ideals using a well-established theoretical model in body image literature—the Tripartite Model of Body Influence (TIM)—has never been established. According to the Tripartite Model of Body Influence, three primary sociocultural sources of influence—parents, peers, and mass media—are hypothesized to exert their effects on body image via two primary mechanisms—appearance comparison and appearance
internalization. An in-depth discussion related to the TIM can be found in Chapter 2. The present study offers a theoretical approach to answer the prevailing research question—*how do consumer culture ideals influence an individual’s ideals and related behavior?*

Second, in this study I also examine the sociocultural antecedents proposed to influence the internalization of cultural ideals. To date, common antecedents of the body ideal and the material good life ideal have not been examined together in a single study. However, divergent studies have addressed the common antecedents (sociocultural factors or otherwise), such as self-esteem (e.g., Dohnt & Tiggemann, 2006; Koff, Rierdan, & Stubbs, 1990; Thompson & Altabe, 1991; Tiggemann & Williamson, 2000; Yurchisin & Johnson, 2004) and sociocultural influences (e.g., parents; Jones, 2011; Manchiraju, 2013). For example, Koff et al. (1990) found that higher levels of body satisfaction are related to higher levels of self-esteem in both males and females. Likewise, in the context of compulsive buying behaviors, Yurchisin and Johnson (2004) found that individuals’ levels of self-esteem and materialism are negatively related.

Third, unlike previous studies (e.g., Ashikali & Dittmar, 2012; Tiggemann & Williamson, 2000) that focused either on male or female samples, the present study examined the relationships among materialism, body esteem, and fashion involvement in male and female samples. Consistent with previous research (Gudnadottir & Gardarsdottir, 2014), it is proposed that both the ideals (i.e., the body perfect and the material good life) have detrimental consequences for both men and women. Therefore, in the present study, research hypotheses pertaining to gender differences are not proposed. However, to check for any potential differences due to gender, the data will be subjected to post-hoc statistical analyses.
Practical Significance

The present study has practical implications. It is anticipated the findings from this present study will be of interest to advertisers, marketers, media activists, and body image education campaigns. For example, mass media (e.g., fashion magazines, television, and advertising) have long been blamed for their advocacy of the body perfect ideal (Thompson & Heinberg, 1999) as well as the material good life ideal (Richins, 1987). Scholars (e.g., Levine & Smolak, 1998) contend that advertisers and marketers may also provide one of the most successful venues for prevention of cultural ideals perpetuation and their negative consequences. One path is through social marketing, which refers to “the adaptation of commercial marketing technologies to programs designed to influence the voluntary behavior of target audience to improve their personal welfare and that of society of which they are a part” (Andreasen, 1994, p. 110). In other words, social marketing is a process that aims to change specific behavior in a specific segment of the population (Thompson & Heinberg, 1999). For instance, social marketing campaigns have been designed to modify community levels of blood cholesterol (e.g., Pawtucket Heart Health Program: Lefebvre & Flora, 1988) and to enhance the general public’s physical activity levels (e.g., Center for Disease Control and Prevention, 1997; Thompson & Heinberg, 1999).

Consequently, the concept of social marketing has been recently mentioned in the context of body image (Levine & Smolak, 1998). Thompson and Heinberg (1999) noted, however, that to develop a successful social marketing campaign, it is important to understand characteristics and needs of the target market. Therefore, the present study is useful to advertisers and marketers to help identify the driving factors which lead to internalization of cultural ideals that contribute
to negative or dysfunctional behavior, thus potentially helping advertisers and marketers to develop effective (social) marketing campaigns.

It is posited that the findings from the present study will also be of interest to media activists for use in body image education campaigns (Bell, 2011; Gudnadottir & Gardarsdottir, 2014; Jasper, 1993; Levine, Piran, & Stoddard, 1999; Thompson & Heinberg, 1999; Yager & O’Dea, 2008). However, to engage in media activism related to cultural ideals, it is important to understand the relationship between cultural ideals and sociocultural perspectives, based on research-oriented models (Levine et al., 1999). For instance, Austin’s Message-Interpretation Process Model helps enhance media literacy skills for children and adolescents with the goal of preventing negative body image and eating disorders (Levine et al., 1999; for more explanation and empirical evidence see Irving, DuPen, & Berel, 1998). The present study has the potential to inform individuals engaged in media activism related to cultural ideals (e.g., body image concerns).

Findings from this study will be useful in body image education campaigns (Gudnadottir & Gardarsdottir, 2014; Levine et al., 1999; Thompson & Heinberg, 1999). For instance, prevention programs that incorporate a critical evaluation of media content must help individuals identify, analyze, and challenge the “body perfect ideal” prevalent in the media (Bordo, 1993; Levine & Smolak, 1998; Thompson & Heinberg, 1999). Similarly, the present study’s findings can be used to develop intervention studies that help individuals who are victims of cultural ideals internalization by educating them about the relationship between the two cultural ideals of the body perfect and the material good life and the potential negative outcomes resulting from internalizing the aforementioned ideals.
Definitions

Appearance comparison: The tendency to engage in social comparison with respect to one’s appearance (Tiggemann & Slater, 2004).

Appearance internalization: “The extent to which an individual cognitively ‘buys into’ socially defined ideals of attractiveness and engages in behaviors designed to produce an approximation of these ideals” (Thompson & Stice, 2001, p. 181).

Body cathexis: “The degree of satisfaction or dissatisfaction with the various parts or processes of the body” (Shim et al., 1991, p. 35).

Body esteem: An individual’s generalized like or dislike towards one’s body (Rosa, Garbarino, & Malter, 2006).

Body image: refers to “how people think, feel, and behave with regard to their own physical attributes” (Muth & Cash, 1997, p. 1438).

Body satisfaction: “An individual’s evaluation of his or her physical size or shape” (Jones, 2011, p. 110).

Consumer involvement: “The level of perceived personal importance, interest or relevance evoked by a stimulus or stimuli, which are linked by the consumer to enduring or situation-specific goals” (Verbeke & Vackier, 2004, p. 159).

Dress: “The assemblage of modifications of the body and/or supplements to the body” (Roach-Higgins & Eicher, 1992, p. 1; also referred to as “fashion” in this study).

Fashion involvement: Consumer involvement in the domain of fashion (specifically in dress for this study) (O’Cass, 2000).

Materialism: “The importance a consumer attaches to worldly possessions” (Belk, 1985, p. 291).
**Self-esteem:** “Attitude towards oneself” (Pearlin & Schooler, 1978, p. 5).

**Sociocultural factors:** In general, from a social psychology (and body image literature) perspective, refers to parents, peers, and mass media.
CHAPTER 2. LITERATURE REVIEW

Chapter Overview

This chapter contains a review of literature related to body satisfaction, fashion involvement, and materialism. The chapter is divided into three sections. In the first section, the tripartite influence model (TIM) of body satisfaction is discussed. In the second section, the concept of fashion involvement and its relevance to the context of body satisfaction is explained. Finally, in the third section, the concept of materialism is introduced. The materialism construct is proposed as an extension of the tripartite influence model (TIM) of body satisfaction. Based on the literature review, 10 hypotheses are presented.

Introduction

In the last 25 years, body image and its subcomponent body satisfaction have received widespread attention (Cash & Smolak, 2011; Feingold & Mazzella, 1998; Keery et al., 2004). In accordance with the complexity of the body satisfaction construct, researchers in the past few years have extensively studied a variety of variables found to be related to body satisfaction—low self-esteem, media pressures, negative affect, parental pressures, peer influences, societally-based thin-ideal internalization, and social comparison processes (Keery et al., 2004; Thompson et al., 1999).

Tripartite Influence Model

Consistent with several sociocultural variables that influence an individual’s body satisfaction, Thompson et al. (1999) proposed the Tripartite Influence Model (TIM). As previously noted, three primary sociocultural sources of influence—parents, peers, and mass media—are hypothesized in the TIM to effect body satisfaction via two primary mechanisms—appearance comparison and appearance internalization. It is important to note the TIM has been mostly employed in the study of eating disorders, such as anorexia nervosa and bulimia (Keery et
al., 2004). However, Tiggemann (2011) noted that the TIM could be adopted for various levels and types of body concern. Therefore, in the present study, the TIM is employed in the context of fashion involvement. In the following paragraphs, the influence of parents, peers, and mass media on body satisfaction are explored.

**Body satisfaction and parents**

As primary socializing agents, parents play an important role in transmitting sociocultural messages to their children (Ricciardelli, McCabe, & Banfield, 2000). These messages often have long-lasting influence. Several qualitative (Ricciardelli et al., 2000; Wertheim, Paxton, Schutz, & Muir, 1997) and quantitative studies (Keery et al., 2004) have noted the importance of familial or parental influence on an individual’s perceived body image and satisfaction. Studies have demonstrated the role of fathers (Wertheim et al., 1997) and mothers’ (Jones, 2011; Ricciardelli et al., 2000) influences on an individual’s body satisfaction.

For instance, mothers act as role models and strong social re-enforcers in relation to girls’ eating attitudes and behaviors (Mukai, 1996). Although mothers have a strong influence on adolescent girls’ attitudes and behaviors toward eating, less is known about fathers’ influences on adolescent girls’ dieting behaviors (McCabe & Ricciardelli, 2001). However, one study (Moreno & Thalen, 1993) found that mothers and fathers did not differ in dieting encouragement given to their daughters.

Likewise, some studies (McCabe & Ricciardelli, 2001; Ricciardelli et al., 2000; Ricciardelli & McCabe, 2001, 2004; Vincent & McCabe, 2000) have explored the influence of parents on boys’ body satisfaction. For example, Ricciardelli and McCabe (2001) confirmed that mothers influence boys’ body image concerns. In fact, they found that boys who received encouragement from their mothers to lose weight were more likely to engage in disruptive body
image-related behaviors (e.g., binge eating, dietary restraint, and normative weight loss). Similarly, Ricciardelli et al. (2000) noted the role of fathers on boys’ body image concerns that lead to risky behaviors (e.g., excessive exercise behavior).

The influence of siblings’ contributions toward development of body satisfaction has been explored. Despite limited literature, it has been found that in general, siblings tend to experience similar levels of body satisfaction (Jones, 2011). Furthermore, Jones noted that siblings’ reflect the family dynamics and are very unlikely to contribute uniquely towards their sibling’s body satisfaction.

In summary, parent-child interactions related to appearance can make contributions to body image satisfaction. Both mothers and fathers play critical roles in communicating appearance-related messages. Furthermore, Jones (2011) mentioned that parental appearance-related criticism and teasing about weight or muscularity have been consistently related to decrement in children’s body satisfaction.

**Body satisfaction and peers**

Peers represent another sociocultural factor for the development of body satisfaction among individuals (Levine, Smolak, Moodey, Shuman, & Hessen, 1994; McCabe & Ricciardelli, 2001; Thompson et al., 1999). Peers have been linked to body image development and satisfaction in research related to friendship, peer acceptance, peer teasing, and romantic partners (Jones, 2011). Furthermore, Jones noted that children and adolescents infuse peer interactions with values and expectations about appearance and gender learned from their family. Thus, an appearance “culture” within the family is modeled and reinforced by peers.

In general, friends and extended friendship groups tend to share similar interests and values in a variety of areas, including appearance (Jones, 2011). For instance, Pyle, Mitchell,
and Eckert (1981) found that friends’ suggestions and encouragement lead to increased dieting behavior in girls. Mukai (1996) found that friends exerted greater influence than did mothers on adolescent girls’ eating attitudes and behaviors. Likewise, Ricciardelli et al. (2000) found that friends influenced adolescent boys’ eating and exercise behaviors.

The aforementioned examples are consistent with the *gender intensification hypothesis*, which states that as adolescents mature physically and emotionally, they begin to identify more strongly with their same-gender stereotype (Hill & Lynch, 1983). Peers contribute towards intensification of gender normative attitudes and behaviors (Bearman, Presnell, Martinez, & Stice, 2006). For girls, physical attractiveness is linked with thinness (Nichter & Nichter, 1991). Consistently, overweight adolescent girls have reported higher body dissatisfaction resulting from peer interaction (Thompson et al., 1999). Thompson et al. (2007) noted that adolescent overweight girls’ body dissatisfaction stems from psychosocial interaction with peers, which includes intentional hurtful comments directed toward overweight girls and social avoidance by peers. Neumark-Sztainer, Story, Hannan, and Croll (2002) found that peers have teased 63% of overweight adolescent girls about their appearance. Likewise, studies (e.g., Lunde, Frisen, & Hwang, 2006) reported cases about boys being teased about their appearance by their peers.

Furthermore, Thompson et al. (2007) noted the multifaceted relationship between body satisfaction and peer influences, including appearance-based conversations, popularity among peers based on appearance, and peer modeling of peer weight concerns. For example, as a result of peer modeling, researchers found that having friends who were dieting to lose weight was associated with a greater use of unhealthy weight-control strategies, such as using dieting pills and smoking among average weight and moderately overweight girls (Eisenberg, Neumark-
Sztainer, Story, & Perry, 2005). Similarly, Jones (2001) demonstrated that boys’ decrement in body satisfaction occurred due to appearance comparison with same-sex peers.

In summary, research has conclusively noted the importance of peers on an individual’s level of body satisfaction. Also, social reinforcement theory (Thompson & Stice, 2001) suggests the values and standards regarding appearance are determined and perpetuated by proximate peers, who reinforce socio-culturally endorsed appearance ideals (e.g., parents and media).

**Body satisfaction and mass media**

According to the TIM, the third sociocultural factor that influences an individual’s level of body satisfaction is mass media (Thompson et al., 1999). Mass media includes television, magazines, video games, cinema, and the Internet, which are part of millions of children, adolescent, and adult daily lives (Levine & Chapman, 2011). Levine and Chapman noted that mass media are “saturated with multiple, overlapping, and unhealthy messages about ideal body sizes and shapes in relation to pleasure, morality, gender, attractiveness, self-control, food, weight management, and power” (p. 101). In general, body ideals created for sexes differ in the U.S., with women portrayed as young, tall, thin, and white; whereas the male body ideal typically emphasizes tall and lean, but muscular with other added features, such as “chiseled” or “ripped” musculature (Levine & Chapman, 2011).

Research (Champion & Furnham, 1999; Dohnt & Tiggemann, 2006; Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002; Hargreaves & Tiggemann, 2004; Kalodner, 1997; Levine, Smolak, & Hayden, 1994; Wertheim et al., 1997) has consistently demonstrated the importance of mass media in the development of body satisfaction. For example, the ubiquitous mass media portrayal of thinness has resulted in the decrement of body satisfaction as well as increase in excessive dieting behaviors among girls (Harrison & Cantor, 1997). Likewise,
correlational studies have shown that adolescent girls who read more magazines and watch more television reported greater body dissatisfaction (Anderson, Huston, Schmitt, Linebarger, & Wright, 2001; Harrison, 2000; Levine et al., 1994). Experimental studies have found that exposure to idealized mass media images leads to decrement in body satisfaction among girls (e.g., Durkin & Paxton, 2002). Furthermore, Kalodner (1997) found that looking at thin models depicted in mass media resulted in anxiety and a decrease in body satisfaction among females. Groesz et al. (2002) conducted a meta-analytic study across 25 published studies. They determined a significant decrement in body satisfaction among the participants after exposure to thin mass media ideals.

Although studies focusing on boys or men’s body satisfaction (Hargreaves & Tiggemann, 2004; Leit, Gray, & Pope, 2002; Lorenzen, Grieve, & Thomas, 2004; Silberstein, Striegel-Moore, Timko, & Rodin, 1988) are limited, there are a few correlational (Harrison, 2000) and experimental (Leit et al., 2002) studies. For example, Lorenzen et al. (2004) found that men’s self-rated body satisfaction decreased after being exposed to muscular mass media ideals. Leit et al. (2002) demonstrated that exposure to ideal male body images in mass media resulted in muscle dysmorphia among participants. Also, influence of mass media on boys’ body satisfaction has been noted (Feingold & Mazzella, 1998; Hargreaves & Tiggemann, 2004; Olivardia, 2001). Hargreaves and Tiggemann (2004) maintained that, like girls, boys’ body satisfaction issues stem from unrealistic appearance ideals,¹ which have become increasingly pervasive in mass media in recent years. In general, it has been noted that mass media influences body satisfaction among boys and men (Cafri & Thompson, 2004; Leit et al., 2002). Furthermore, Hargreaves and Tiggemann (2004) noted, “repeated exposure to images of

¹ The current ideal male body is lean but highly muscular (Hargreaves & Tiggemann, 2004), characterized by a “well-developed chest and arms, with wide shoulders tapering down to a narrow waist” (Pope, Phillips, & Olivardia, 2000, p. 30).
unrealistically muscular male ideals may cause men to feel insecure about their own bodies, parallel to the way in which exposure to images of unrealistically thin models promotes body dissatisfaction among girls” (p. 352).

In summary, irrespective of biological sex, studies have found that body satisfaction issues are prevalent among individuals in the U.S. (Bearman et al., 2006; Frith & Gleeson, 2004; Hargreaves & Tiggemann, 2004; Kostanski, Fisher, & Gullone, 2004; Presnell, Bearman, & Stice, 2004; Wood, Becker, & Thompson, 1996). For example, 90% of undergraduate males in the U.S. expressed their desire to be more muscular (Karazsia & Crowther, 2009). Likewise, body dissatisfaction among women is so common, it is considered “normative discontent” (McLaren & Kuh, 2004, p. 1576). Several scholars (e.g., Levine & Murnen, 2009) have contended that mass media causes decrement in body satisfaction among individuals.

**Appearance Comparison**

According to the TIM, sociocultural factors (i.e., parents, peers, and mass media) influence an individual’s level of body satisfaction through two mediating mechanisms. One is social comparison. Several studies have noted the importance of social comparison within the domain of body satisfaction (Durkin & Paxton, 2002; Faith, Leone, & Allison, 1997; Hargreaves & Tiggemann, 2004; Heinberg & Thompson, 1992, 1995; Jones, 2001; Tiggemann & McGill, 2004; Tiggemann & Slater, 2004). For example, Hargreaves & Tiggemann (2004) have proposed that viewing television or reading fashion magazines prompts individuals to evaluate their own appearance by comparing with salient and highly attractive models who pervade mass media.

In 1954, Festinger proposed social comparison theory, with the central proposition that the individual’s drive for self-evaluation can be met by comparisons with others. For instance,
social comparison is based on two self-based references—*criteria* and *normative* (Owens, 2003). Criteria-based social comparison comes into play when one compares the self to others in terms of superiority or inferiority, or as better or worse on some criteria of interest (e.g., physical attractiveness). On the other hand, normative-based comparison comes into play when one evaluates one’s deviance from or conformity with others in general or perceived as “average.” Individuals have several underlying motives for engaging in social comparison, such as self-enhancement and self-improvement (Jones, 2001; Hargreaves & Tiggemann, 2004; Tiggemann & Slater, 2004; Wood, 1989). Typically, irrespective of the motives, engaging in social comparison can have negative implications, including negative effects on one’s mood and self-esteem (Major, Testa, & Bylsma, 1991).

Social comparisons are also likely to occur in the context of sociocultural body ideal comparison (Tiggemann & Slater, 2004). For example, Wertheim et al. (1997) found that social comparison played an important role in young girls’ pursuits of thin ideal bodies. In the same study, young girls reported their social comparison targets to be other girls in school, TV models, family members, friends, or popular girls in school. Similarly, Stormer and Thompson (1996) found that social comparison influenced girls’ body satisfaction and dieting behaviors. Ricciardelli et al. (2000) found that young boys engaged in social comparisons of appearance, with target comparisons including friends, media personalities, or physically bigger males. Studies (Ashikali & Dittmar, 2012; Heinberg & Thompson, 1995) have demonstrated that adults engage in appearance comparison as well.

Additionally, there is a possibility that stable individual differences exist in the context of appearance comparison tendency (Hargreaves & Tiggemann, 2004). It has been proposed that certain individuals are more susceptible to appearance comparison, and, therefore, are more
vulnerable to body satisfaction issues (Hargreaves & Tiggemann, 2004). Individuals who have trait-like tendencies to engage in appearance-related social comparisons or who are highly invested in appearance are referred to as appearance schematics (Cash & Labarge, 1996; Hargreaves & Tiggemann, 2004; Thompson, Heinberg, & Tantleff, 1991) and are more likely to engage in appearance comparisons. Based on the literature reviewed in relation to the TIM, the following hypotheses are proposed:

**H1**: Sociocultural factors (i.e., parents, peers, and mass media) positively influence appearance comparison, such that:

**H1a**: Perceived level of parental pressure to attain the body perfect ideal is positively related to appearance comparison.

**H1b**: Perceived level of peer pressure to attain the body perfect ideal is positively related to appearance comparison.

**H1c**: Perceived level of mass media pressure to attain the body perfect ideal is positively related to appearance comparison.

**Appearance Internalization**

According to the TIM, the second mediating mechanism through which sociocultural factors influence an individual’s level of body satisfaction is internalization (Keery et al., 2004; Thompson et al., 1999; Thompson & Stice, 2001). Internalization refers to “the extent to which an individual cognitively ‘buys into’ socially defined ideals of attractiveness and engages in behaviors designed to produce an approximation of these ideals” (Thompson & Stice, 2001, p. 181). Internalization occurs because individuals adopt and absorb attitudes and expectations of significant others or respected others—parents, peers, and mass media (Kandel, 1980; Thompson et al., 1999)—also referred to as social reinforcement (Thompson & Stice, 2001). Perpetuating
body ideals through various sociocultural factors involves internalization (Thompson & Stice, 2001). Various sociocultural factors convey the benefits of meeting body ideals (e.g., social acceptance), which further contributes toward propagation of these ideals (Hohlstein, Smith, & Atlas, 1998; Thompson & Stice, 2001).

Theoretically, females and males who have internalized body ideals would be vulnerable to body dissatisfaction (Bearman et al., 2006; see also gender intensification hypothesis, Hill & Lynch, 1983). Consistently, from the TIM perspective, internalization leads to decrement in body satisfaction, primarily because socio-culturally perpetuated body ideals are impossible to attain by most individuals (Thompson & Stice, 2001). Furthermore, the resulting increase in dissatisfaction stemming from internalization may have several negative consequences, such as eating disorders and negative effects on mood (e.g., Thompson et al., 1999). For example, female individuals who internalize the thin-ideal tend to suffer from body satisfaction decrement (Jones, 2004; Stice & Bearman 2001; Stice & Whitenton, 2002; Thompson et al., 1999).

Research exploring the relationship between appearance internalization and body satisfaction in the context of male ideals is limited (Bearman et al., 2006). McCreary and Sasse (2000) demonstrated that the drive for musculularity correlated with low self-esteem and strategies to increase body mass. Smolak, Levine, and Thompson (2001) found that internalization of socio-culturally transmitted male ideals is related to weight control techniques for boys. Jones (2004) found that body ideal internalization is a strong predictor of body dissatisfaction among boys.

In summary, consistent with the TIM, appearance internalization mediates the relationships between sociocultural factors (i.e., parents, peers, and mass media) and level of body satisfaction. Furthermore, this is consistent with the individual differences mentioned
previously (e.g., appearance schematics). Based on the literature reviewed and the TIM, the following hypotheses are proposed:

**H2**: Sociocultural factors (i.e., parents, peers, and mass media) positively influence appearance internalization, such that:

**H2a**: Perceived level of parental pressure to attain the body perfect ideal is positively related to appearance internalization.

**H2b**: Perceived level of peer pressure to attain the body perfect ideal is positively related to appearance internalization.

**H2c**: Perceived level of mass media pressure to attain the body perfect ideal is positively related to appearance internalization.

Also, according to the TIM, appearance comparison is an antecedent of appearance internalization. Additionally, per the TIM, the relationship between sociocultural factors (i.e., parents, peers, and mass media) and an individual’s level of body satisfaction (e.g., Keery et al., 2004) is mediated by two constructs, namely appearance comparison and appearance internalization. Therefore, consistent with the TIM, the following hypotheses have been proposed:

**H3**: Appearance comparison is positively related to appearance internalization.

**H4**: Appearance comparison is negatively related to an individual’s level of body esteem.

**H5**: Appearance internalization is negatively related to an individual’s level of body esteem.
Fashion Involvement

The concept of consumer involvement has received widespread attention from researchers and practitioners alike (Muehling, Lacznia, & Andrews, 1993; Naderi, 2013; O’Cass, 2000). Consumer involvement refers to “the level of perceived personal importance, interest or relevance evoked by a stimulus or stimuli, which are linked by the consumer to enduring or situation-specific goals” (Verbeke & Vackier, 2004, p. 159). Relevant stimuli can be products, services, product categories, brands, purchase decisions, or advertisements (Beharrell & Dennison, 1995; Juhl & Poulsen, 2000; Mitchell, 1979; Zaichkowsky, 1985). The concept of consumer involvement has the potential to explain the consumer decision-making process, which includes aspects such as information search, length of decision-making process, formation of beliefs, attitudes, and behavioral intentions, as well as other behavioral outcomes including variety seeking behavior or frequency of product usage (Verbeke & Vackier, 2004).

“Involvement is viewed as a construct linked to the interaction between an individual and an object and refers to the relative strength of consumers’ cognitive structure related to a focal object (e.g., products)” (O’Cass, 2000, p. 548). In other words, involvement refers to what the consumer views as the focal object that is a central part of his or her life, i.e., objects which are meaningful and engaging (O’Cass, 2000). Furthermore, involvement is conceptualized as enduring (e.g., Bloch, 1981; Bloch & Richins, 1983). Characteristics of the environment and temporary situational changes encountered by the consumer do not directly change involvement levels (O’Cass, 2000). In fact, Clarke and Belk (1979, p. 313) argued, “while there are individual differences in levels of involvement with a given product, with a relatively homogenous population, the rank orders of involvement with an array of products are expected to be reasonably constant.”
The concept of involvement is consistently found to have effects on purchasing different product category (or categories), which one is involved in (Naderi, 2013). Involvement has been identified as the heart of person-object relationships and relational variables most predictive of purchase behaviors (O’Cass, 2000). Consequently, the concept of involvement has been explored in the domain of fashion as well (Auty & Elliot, 1998; Browne & Kaldenberg, 1997; Flynn & Goldsmith, 1993; Goldsmith, 2000, 2002; Jin & Koh, 1999; O’Cass, 2000, 2004; Richins & Bloch, 1992; Warrington & Shim, 2000). Involvement is a crucial consideration in fashion purchase behavior because body-related fashion is considered a high-involvement product class (Clarke & Belk, 1979; Naderi, 2013; O’Cass, 2004).

Dress of an individual is defined as the “assemblage of modifications of the body and/or supplements to the body” (Roach-Higgins & Eicher, 1992, p. 1). Therefore, dress includes “a long list of possible direct modifications of the body such as coiffed hair, colored skin, pierced ears, scented breath… garments, jewelry, accessories, and other categories of items added to the body as supplements” (Roach-Higgins & Eicher, 1992, p. 1). In the present study, the term “dress” is used in the broadest possible sense to include purposeful or intended appearance modifications, adornment, clothing, apparel, costume, and other body modifications (for an explanation of various terminologies, see Roach-Higgins & Eicher, 1992) that are observable or perceivable by others.

Various researchers (Guy & Banim, 2000; O’Cass, 2000; Roach-Higgins & Eicher, 1992; Stone, 1962) have discussed the relevance of dress (or fashion) in the context of involvement. For instance, dress acts as a medium of communication, which includes an endless array of possible meanings that include age, gender, social class, school affiliation, religion, and other characteristics of the wearer. Likewise, dress acts as a communicator of one’s identity
(Erikson, 1946). For example, from a symbolic interaction theory perspective, individuals acquire identities through social interaction in various social, physical, and biological settings (Stone, 1962). Identities are communicated by dress, as it announces social positions of the wearer to both the wearer and the observers within a particular interaction situation (Stone, 1962). Apart from the symbolic importance dress has in the consumption context, O’Cass noted that fashion involvement is important due to other factors, such as: (1) the defining role of fashion in U.S. society and (2) the continual and cyclical nature of fashion, which continually draws individuals to engrossment with new styles.

Due to the importance ascribed to consumer involvement within the appearance context, diverse studies have explored its role in fashion leadership (Goldsmith, Heitmeyer, & Frieden, 1991), brand involvement (Browne & Kalderberg, 1997), information search (Jin & Koh, 1999), spending patterns (Goldsmith, 2000), brand commitment (Warrington & Shim, 2000), shopping orientation (Belleau, Nowlin, Summers, & Xu, 2001), online shopping (Goldsmith & Flynn, 2004), compulsive buying behaviors (Yurchisin & Johnson, 2004), impulsive buying behaviors (Park, Kim, & Forney, 2006), and many other contexts. For instance, Flynn and Goldsmith (1993) found that an individual’s fashion involvement was positively related to the frequency of shopping and monthly spending. Goldsmith (2000) determined that fashion involvement was positively related to spending for new fashion. In an online apparel shopping context, Goldsmith and Flynn (2004) found that fashion involvement was positively related to the amount of money spent on fashion products.

**Relationship between body satisfaction and fashion involvement**

Research suggests that a vast majority of individuals consider their body an important domain of the self (Woodman & Hemmings, 2008). For instance, in a study by Markus and
Nurius (1986), 96.5% of the participants reported being “in good shape” as an indicator of their ideal self. Researchers have demonstrated that an individual’s level of body satisfaction can influence various domains, such as eating disorders (Ata, Ludden, & Lally, 2007), self-esteem (Clay, Vignoles, & Dittmar, 2005), depression (Goldfield et al., 2010), negative affect (Woodman & Hemmings, 2008), self-concept (Shim, Kotsiopulos, & Knoll, 1991), and psychological well-being (Yuan, 2010).

Clothing has been referred to as: “a ‘second skin’ or extension of the bodily self that represents the nearest aspect of one’s environment” (Shim et al., 1991, p. 35). It has been maintained that self-feelings about one’s body play a major role in clothing preferences and attitudes (Shim et al., 1991). Consistently, researchers (e.g., Kwon, 1991; Kwon & Parham, 1994; Seock & Merritt, 2013) have demonstrated that an individual’s level of body satisfaction influences his or her clothing behavior. For instance, Seock and Merritt (2013) found that adolescent girls’ levels of body satisfaction influenced their body-concealing or body-enhancing clothing choices. Chattaraman, Simmons, and Ulrich (2013) found that level of body satisfaction influenced men’s clothing choices. Consistent with the definition of dress, which includes all observable body modifications, Sarwer, Wadden, Pertschuk, and Whitaker (1998) found that individuals who undergo plastic surgery are more likely to suffer from body dissatisfaction. Simis, Verhulst, and Koot (2003) reported similar findings for adolescents and young adults undergoing plastic surgery.

The relationship between body satisfaction and fashion involvement can be explained through self-objectification theory (Fredrickson & Roberts, 1997). Self-objectification is defined as “valuing one’s own body more from a third-person perspective, focusing on observable body attributes (e.g., how do I look?), rather than first-person perspective, focusing on privileged, or
non-observable body attributes (e.g., what am I capable of? How do I feel?)” (Noll & Fredrickson, 1998, p. 624). Self-objectification has been associated with a host of negative outcomes, such as body shame and disordered eating (McKinley & Hyde, 1996). Also, self-objectification is characterized by constant and habitual monitoring of the external appearance (e.g., McKinley & Hyde, 1996; Tiggemann & Kuring, 2004; see also appearance schematic, Tiggemann, Hargreaves, Polivy, & McFarlane, 2003).

Dress is external appearance that shapes self-presentation (Schneider, 1974). Therefore, several studies have explored the relationship between self-objectification and dress (Fredrickson & Roberts, 1997; Gurung & Chrouser, 2007; Hebl, King, & Lin, 2004; Prichard & Tiggemann, 2005; Tiggemann & Andrew, 2012). For example, Tiggemann and Andrew (2012) demonstrated that self-objectification was related to an individual’s motive behind choosing a specific clothing adoption strategy (e.g., wearing revealing clothes vs. modest clothes). Additionally, self-objectification is not only related to dress, but also to body satisfaction (Hebl et al., 2004). For both men and women, self-objectification has been linked to body satisfaction level (Morry & Staska, 2001). Furthermore, according to Morry and Staska (2001), self-objectification arises from appearance internalization and appearance comparison. The relationships among self-objectification (e.g., appearance schematics), body satisfaction, and fashion involvement have been explored (see Kim & Damhorst, 2010).

There are some studies (Kim, 2008; Littrell, Damhorst, & Littrell, 1990; Thompson & Hirschman, 1995; Tiggemann & Lacey, 2009; Wang, 2007) that have explored the relationship between body satisfaction and fashion involvement (or “interest”). Individuals engage in fashion-related activities to improve their appearance and self-presentation, as well as to enhance their feelings about themselves (Tiggeman & Lacey, 2009). Several scholars (Apeaggyei, 2008;
Frith & Gleeson, 2004; Tiggeman & Lacey, 2009) have noted the importance of dress (or fashion) in the context of body satisfaction research. They also contend that dress or fashion involvement is an under-researched aspect in body image literature (Tiggeman & Lacey, 2009). Frith and Gleeson (2004) mentioned that our understanding of the relationship between these two variables is far from complete. Kim (2008) noted that the relationship between these two variables is not clear.

Some researchers (e.g., Kim, 2008; Rosa et al., 2006) have mentioned two diametrically opposite explanations relevant in the context of body satisfaction and fashion involvement (see also Brown, Collins, & Schmidt, 1988). One explanation is that body esteem is positively correlated with fashion involvement (Rosa et al., 2006). From this perspective, it is maintained that individuals with high body esteem constantly engage in maintaining or enhancing their self-concept through their high involvement in appearance-related activities (e.g., fashion). Therefore, it is argued that individuals with high body esteem view body-involving products (e.g., apparel) as potential re-enforcers of their self-concept, and, therefore, are more invested in such products (Rosa et al., 2006). On the other hand, this perspective maintains that individuals with low body esteem are not highly invested (or involved) with body-involving products because they do not perceive these products as affirming their self-concept.

In contrast, body esteem has been associated with self-confidence (Striegel-Moore, Silberstein, & Rodin, 1993). Thus, the higher the body esteem of an individual, the higher his or her self-confidence related to appearance. If individuals have high body esteem, they are not highly invested in body-involving products because their appearances do not need any bolstering (Rosa et al., 2006). However, individuals with low body esteem will be highly engaged with
body-involving products because they perceive them as a means to bolster their appearances and self-esteem (Rosa et al., 2006).

Of course, the relationships found in previous research are not 100%, because some individuals high on body esteem and self-confidence are involved with appearance products as a creative, aesthetic outlet. And not all individuals with low body esteem are involved in appearances; they may give up on presentation of self as a means of bolstering self-confidence. Research exists that supports both perspectives (Dubler & Gurel, 1984; Kim, 2008; Rosa et al., 2006). Additionally, one study (Wang, 2007) found no relationship between body esteem and fashion involvement. Wang explored the relationship between these two constructs in the context of plus-size consumers.

Dress serves as a “second skin” that can alter one’s perceived body image and can be used to improve one’s body satisfaction or hide one’s body dissatisfaction in comparison to cultural ideals (Kaiser, 1997). Given the conflicting opinions, it is worth clarifying the relationship between body satisfaction and fashion involvement (Kim, 2008). Therefore, the following hypothesis is proposed without specifying the nature of the relationship (i.e., positive or negative) between the two constructs.

**H6: An individual’s level of body satisfaction is related to one’s fashion involvement.**

**Materialism**

Materialism is defined as “the importance a consumer attaches to worldly possessions” (Belk, 1985, p. 291). Extensively studied by scholars from various fields, such as advertising, agriculture, anthropology, consumer behavior, marketing, economics, history, medicine, philosophy, psychology, political science, and social sciences (Inglehart, 1981; Larsen, Sirgy, & Wright, 1999; Mannion & Brannick, 1995; Scott, 2009), materialism is a complex, multi-faceted
phenomenon (Larsen et al., 1999). Accordingly, materialism has been viewed from socio-cultural as well as individual perspectives (Hunt, Kernan, & Mitchell, 1996). Of particular interest, for the present study, is the individual perspective.

Individual materialism is on the rise (Ghadrian, 2010). For example, Myers (2012) mentioned a study conducted by the University of California–Los Angeles American Council of Education that surveyed a quarter million collegians. The proportion of individuals who expressed financial success as very important to them increased from 39% in 1970 to 78% in 2009. Similarly, 95% of adults felt that children are too focused on buying and consuming things (Chaplin & John, 2007). Several antecedents of individual materialism have been proposed (see Chang & Arkin, 2002; Kasser, 2002; Ghadirian, 2010; Larsen et al., 1999).

As an individual phenomenon, materialism refers to personal priorities; a materialistic person values material objects highly (Larsen et al., 1999) and is likely to pursue material possessions and desires to accumulate income and wealth (Hudders & Pandelaere, 2012). Materialism has been conceptualized as an attitude, belief, lifestyle, Lebensführung (in German, life conduct), state (i.e., mood), trait, and value (Ahuvia, 2008; Belk, 1985; Chang & Arkin, 2002; Mannion & Brannick, 1995; Richins & Dawson, 1992).

However, Richins and Dawson’s (1992) materialism scale is the most widely used instrument to measure individual materialism (Shrum et al., 2013). Richins (1994) (see also Richins & Dawson, 1992) explained materialism as a value. A value, as defined by Rokeach (1973), is “a centrally held, enduring belief which guides actions and judgments across specific situations and beyond immediate goals to more ultimate end-states of existence” (p. 161). Accordingly, Richins and Dawson (1992) defined materialism as a “set of centrally held beliefs about the importance of possessions in one’s life” (p. 308).
Materialism and the TIM

As with body satisfaction, several researchers (Bush, Martin, & Clark, 2001; Chaplin & John, 2010; Manchiraju, 2013) noted the importance of socio-cultural influence in the development of the individual value of materialism. For example, Chaplin and John (2010) stated, “the most consistent finding to date is that adolescent materialism is related to the interpersonal influences in their lives—notably parents and peers” (p. 176). Likewise, Bush et al. (2001) demonstrated the influence of interpersonal, as well as the role of mass media, on adolescent materialism. In the following paragraphs, the roles of various socio-cultural influences (i.e., parents, peers, and mass media) on the development of individual materialism are explained. The following discussion is based on social learning theory. Social learning theory indicates that human behavior is based on modeling behavior, by which individuals learn to model or emulate behaviors, attitudes, and skills of others (Bandura, 1977; Bush et al., 2001; see also theory of cognitive development, Piaget, 1970; theory of social developments, Selman, 1980).

Several studies (Churchill & Moschis, 1979; Flouri, 2004; Moore & Moschis, 1981; Moschis, 1985) have demonstrated the role of parents in the development of materialism among individuals. For instance, Moore and Moschis (1981) examined family communication styles, which suggested certain communication styles (e.g., socio-oriented) promote conformity towards others’ views, setting the stage for materialism. Likewise, Goldberg, Gorn, Peracchio, and Bamossy (2003) noted that parents transmit materialistic values to their offspring by modeling these values. In other words, materialism develops when individuals are exposed to social role models who encourage materialistic values, as noted by Kasser, Ryan, Couchman, and Sheldon
Chaplin and John (2010) noted that if parents spend too much time working on external success and higher living standards, children tend to learn these values from their parents.

As mentioned earlier, one’s peers strongly influence an individual. In fact, research studies have documented the role of children’s peer groups (e.g., classmates and teammates) as important socializing agents, who contribute toward a child’s psychosocial development (Weiss & Ebbeck, 1996). For example, peer pressure has been noted as one of the reasons why adolescents value material goods and popular brands (Chaplin & John, 2010). Chaplin and John proposed that peers are considered more important than parents in influencing the adoption of materialistic values. For instance, when adolescents communicate with their peers about consumption (e.g., what are the cool brands?) and observe such acquisitive behavior of their peers, individuals tend to model such behaviors and want the same things their peers want or have (Chaplin & John, 2010).

Numerous studies (Bush et al., 2001; Pollay, 1986; Richins, 1987; Shrum, Burroughs, & Rindfleisch, 2005) have noted the importance of mass media in the propagation of materialistic values among the general population. Bush et al. (2001) demonstrated that individuals learn materialistic values not only from direct contact models (e.g., parents and peers), but also from vicarious role models (e.g., movie and sports stars). King and Multon (1996) found that adolescent career choices are significantly influenced by the occupation of television characters they see as role models.

From the explanation provided in the preceding paragraphs and consistent with the TIM’s propositions related to body satisfaction, socio-cultural factors (i.e., parents, peers, and mass media) play an important role in individual materialism as well. However, the explanation provided does not explain how appearance or body image related to socio-cultural factors
contributes to individual materialism. As noted earlier, research studies related to body satisfaction and materialism are few. The following paragraphs explain the rationale to include materialism as an extension of the TIM.

Theoretically, the relationship between body satisfaction and materialism can be derived from the concept of self-esteem. In general, self-esteem is akin to an “attitude towards oneself” (Pearlin & Schooler, 1978, p. 5; for an in-depth discussion see Mruk, 2006). Several studies have noted the importance of self-esteem in the context of body satisfaction (Abell & Richards, 1996; Dohnt & Tiggemann, 2006; Tiggemann & Williamson, 2000) and materialism (Braun & Wicklund, 1989; Brown, Collins, & Schmidt, 1988; Chang & Arkin, 2002; Chaplin & John, 2007, 2010; Flouri, 2004; Mick, 1996; Richins & Dawson, 1992). In both cases (i.e., individual’s level of body satisfaction and materialism), the relationship with self-esteem is inversely related. For example, Brown et al. (1998) found that individuals with low self-esteem tend to engage in self-enhancing behaviors (e.g., boosting one’s self-concept) by attaching themselves to material things that have significant value. Solomon (1983) noted that adolescent boys with a fragile masculine self-concept try to bolster their self-image by using “macho” products, such as clothes, cars, and colognes. Beginners in tennis committed to the game tended to wear branded clothes more often, when compared to expert players who presumably are more self-confident (Braun & Wicklund, 1989). The aforementioned proposition (and examples) is consistent with Wicklund and Gollwitzer’s (1981) symbolic self-completion theory. According to symbolic self-completion theory, when important symbols (i.e., indicators of self-definition) are lacking, individuals strive to attain the symbols that further their self-definition (Wicklund & Gollwitzer, 1981; see also self-enhancement theory, Shrauger, 1975; self-consistency theory, Lecky, 1945).
Furthermore, these studies demonstrate that some of the factors contributing to lower self-esteem are parents, peers, and mass media (see Chaplin & John, 2010; Dohnt & Tiggemann, 2006). Therefore, it is possible that individuals who have internalized the body ideals propagated by socio-cultural factors might experience lower self-esteem. In turn, this decrement in one’s self-esteem is compensated by acquisition of material goods (e.g., expensive apparel and accessories) to experience a sense of security in an invested domain (i.e., meeting socio-cultural body ideal standards). In fact, research studies (Chan, 2003; Chaplin & John, 2010; Churchill & Moschis, 1979; Goldberg et al., 2003; Moschis & Churchill, 1978; Moschis & Moore, 1979, 1982) have found that the relationship between socio-cultural factors (e.g., parents and peers) and an individual’s level of materialism exist. For example, Chaplin and John (2010) found that adolescents who lacked support (i.e., warmth, affection, nurturance, and acceptance) from their parents and peers for a development of healthy and complete self-concept were more likely to have lower self-estees and are were likely to rely on material possessions to feel better about themselves. Thus, these adolescents tended to be more materialistic. Based on the aforementioned literature and the symbolic relationship of materialism and body perfect ideals, the following hypothesis is proposed:

**H7**: Sociocultural factors positively influence an individual’s level of materialism, such that:

**H7a**: Perceived level of parental pressure to attain the body perfect ideal is positively related to an individual’s level of materialism.

**H7b**: Perceived level of peer pressure to attain the body perfect ideal is positively related to an individual’s level of materialism.
Perceived level of mass media pressure to attain the body perfect ideal is positively related to an individual’s level of materialism.

Materialism and Appearance Comparison

Scholars (Ashikali & Dittmar, 2012; Bartky, 1982; Chan & Prendergast, 2008; Henderson-King & Brooks, 2009; Kasser, 2002; Kasser & Ryan, 1996; Workman & Lee, 2011) have discussed the relationships between materialism and appearance. For instance, Henderson-King and Brooks (2009) found an individual’s level of materialism positively predicted cosmetic surgery attitudes. Moreover, they found that women with higher materialistic aspirations reported an interest in having a higher number of cosmetic surgery procedures. However, the direct relationship between materialism and appearance comparison has not been explored to date. Appearance comparison (or appearance social comparison) refers to cognitive judgments that individuals make about their own appearance relative to others (Jones & Crawford, 2006).

In the present study, the relationships between aforementioned constructs explained through the concept of self-monitoring, also have been associated with physical appearance (Snyder, Berscheid, & Glick, 1985; Snyder, Berscheid, & Matwychuck, 1988; Terkildsen, 1993). Self-monitoring refers to the control and regulation of one’s self-presentation (Zuckerman, Gioioso, & Tellini, 1988; for a review see Shaw & Costanzo, 1982; Snyder, 1987). Stated differently, “the theory of self-monitoring concerns differences in the extent to which people value, create, cultivate, and project social images and public appearances” (Gangestad & Snyder, 2000, p. 531). Accordingly, Zuckerman et al. (1988) noted that high self-monitors focus on self-presentation (or behavior), which is consistent with social norm appropriateness; whereas, low self-monitors adjust their self-presentation (or behavior) to reflect their inner states.
Several studies have explored the role of self-monitoring within the realm of consumption (Hogg, Cox, & Keeling, 2000; Snyder, 1987; Snyder & DeBono, 1985). For example, Snyder and DeBono showed advertisements, either product image-based or product quality-based, to high and low self-monitors. They found that high self-monitors rated image-based advertisements as more appealing, were willing to pay more, and were more likely to want to purchase the product. On the other hand, low self-monitors found product quality-based advertisements more appealing and persuasive. This has led some researchers (Browne & Kaldenberg, 1997) to argue that product and brand choice may reflect differences in concerns related to appearance and prestige among low and high self-monitors.

Snyder (1987) suggested that self-monitoring affects consumer behavior because it is associated with maintaining one’s image using possessions that convey an image of self to others. Consequently, Browne & Kaldenberg (1997) posed the question, “If high self-monitors do emphasize image and material signs of it…one might ask what relationship self-monitoring has to being materialistic” (p. 33).

Several studies (Browne & Kaldenberg, 1997; O’Cass, 2001) have explored the relationship between materialism and self-monitoring. Browne and Kaldenberg (1997) found that materialism and self-monitoring were significantly and positively related. The connection between self-monitoring and materialism seems logical (Browne & Kaldenberg, 1997). For example, both high materialists and high self-monitors place importance on external contingencies—products, brands, physical appearance, body image, and self-presentation concerns (Ashikali & Dittmar, 2012; Browne & Kaldenberg, 1997; Christopher & Schlenker, 2004; Sullivan & Harnish, 1990). Thus, it can be concluded that materialism and appearance comparison constructs are related.
Within the context of materialism and appearance comparison, one relevant aspect of self-monitoring is *social referential comparison*, a form of social comparison (Bandura, 1991). Social referential comparison refers to one’s adequacy within a certain domain, when defined relationally (Bandura, 1991). Bandura maintained that social referential comparison stems from three sources: (1) one’s attained performance level, (2) one’s personal standards, and (3) the performance of others (e.g., friends and work associates). In other words, within the context of physical appearance, Bandura proposed social referential comparison stems from three sources: (1) one’s attention towards one’s physical appearance, (2) one’s personal physical appearance standards, and (3) the physical appearance of others (e.g., friends and role models).

In the context of appearance comparison, high materialists are susceptible to appearance comparison (Ashikali & Dittmar, 2012; for self-monitoring context, see Sullivan & Harnish, 1990; Tucker, 1985). Within the context of materialism, Ashikali and Dittmar (2012) found that high materialists were more likely than low materialists to compare themselves with idealized female models featured in mass media. Based on the aforementioned literature, the following hypothesis is proposed:

**H8: An individual’s level of materialism is positively related to his or her tendency to engage in appearance comparisons.**

### Materialism and Appearance Internalization

Few studies (Ashikali & Dittmar, 2012; Bell, 2011; Dittmar, 2008; Easterbrook, Wright, Dittmar, & Banerjee, 2014; Gudnadottir & Gardarsdottir, 2014) have addressed the relationships between materialism and **appearance internalization**. Appearance internalization refers to the active endorsement of the body perfect ideal to the extent that the body perfect ideal becomes a psychologically ideal goal, which dictates an individual’s attitude and behavior (Bell, 2011).
Dittmar (2008) noted that the relationship between materialism and appearance internalization are obvious for several reasons. First, internalization of materialism and body ideals has been associated with similar negative outcomes. For instance, Kasser and Ryan (1996) found that materialism and body ideals internalization were clustered under the group “extrinsic” factors, whose relationships with well-being measures were then assessed. They found that extrinsic factors were negatively related to positive affect, self-actualization, and vitality. Furthermore, the extrinsic factor dimension was positively related to depression, narcissism, and physical symptoms of illness. Likewise, several meta-analytic studies related to materialism (Barlett, Vowels, & Saucier, 2008) and/or appearance internalization (e.g., Grabe et al., 2008; Groesz et al., 2002) have found their negative relationship with well-being measures for both men and women. Recently, Easterbrook et al. (2014) established a negative relationship between cultural ideals internalization and well-being among children through an empirical study.

Second, the sources and re-enforcers of the two cultural ideals internalizations are parents, peers, and mass media (Ashikali & Dittmar, 2012; Bell, 2011; Dittmar, 2008; Easterbrook et al., 2014). For instance, mass media regularly depicts physical attraction and material wealth paired simultaneously and bound in symbolic partnership by fashion and cosmetic industries (Dittmar, 2008; Easterbrook et al., 2014). Furthermore, evidence suggests that individuals exposed to more mass media (e.g., advertisements and television) are more likely to internalize materialism (Sirgy et al., 1998) and appearance ideals (Hatoum & Belle, 2004).

Finally, beyond the commonalities between the two cultural ideals, recent studies (Ashikali & Dittmar, 2012) found a positive correlation between internalization of the body perfect ideals and the material good life ideals. Likewise, different types of studies—one theoretical
(Dittmar, 2008), empirical (Ashikali & Dittmar, 2012; Easterbrook et al., 2014), and qualitative (Wright, Dittmar, & Banerjee, 2011)—have suggested relationships between the two cultural ideals. Therefore, Easterbrook et al. (2014) concluded that the two cultural ideals (i.e., the body perfect and the material good life) are strongly related and reflect an overarching consumer culture construct. Based on the aforementioned literature, the following hypothesis is proposed:

**H9: An individual’s level of materialism is positively related to one’s degree of appearance internalization.**

**Materialism and Fashion Involvement**

Highly materialistic individuals find possessions involving and devote considerable amount of time and energy to products and brands (Browne & Kaldenberg, 1997). Also, highly materialistic individuals are concerned with self-presentation concerns (Belk, 1985; Browne & Kaldenberg, 1997; Christopher, Morgan, Marek, Keller, & Drummond, 2005; Christopher & Schlenker, 2004). Christopher and Schlenker found that the negative relationship between materialism and well-being is related to an individual’s level of self-presentational concerns. Likewise, Christopher et al. (2005) demonstrated that highly materialistic individuals are more likely to adopt certain self-presentation styles (e.g., self-promotional) than individuals who are low on materialism. Thus, a greater level of materialism seems associated with an understanding that possessions serve as a part of communication to inform others about the self (Douglas & Isherwood, 1979). Therefore, materialism is associated with higher purchasing involvement (Browne & Kaldenberg, 1997).

Several studies have explored the relationship between materialism and fashion involvement (Browne & Kaldenberg, 1997; Goldsmith & Clark, 2008; O’Cass, 2004; Vieira, 2009; Yurchisin & Johnson, 2004). As previously mentioned, apparel, in general, is considered
a high-involvement product. Therefore, materialists concerned with self-presentation are likely to be highly involved in apparel or body-related fashion, also referred to as a “second skin” (Horn & Gurel, 1981; Shim et al., 1991). Browne and Kaldenberg (1997) found that respondents with high levels of materialism were more interested in clothing, derived more pleasure from clothing, were more likely to understand the symbolic nature of clothing, and considered clothing purchases important. Likewise, O’Cass (2004) found that materialism was significantly and positively related to fashion involvement. Yurchisin and Johnson (2004) found that materialism and apparel-product involvement were positively related in the context of compulsive buying behavior. Vieira (2009) found a positive relationship between materialism and fashion involvement. Therefore, based on the literature reviewed, the following hypothesis is proposed:

**H10: An individual’s level of materialism is positively related to one’s degree of fashion involvement.**

In sum, based on the extensive literature review related to the TIM, materialism, and fashion involvement, 10 hypotheses have been proposed. Furthermore, the relationships in the proposed hypotheses are based on several concepts (e.g., appearance schematics, gender intensification hypothesis) and theories (e.g., social learning theory, social reinforcement theory, symbolic interaction theory), thereby extending the TIM model to include materialism and fashion involvement constructs. Figures 1a and 1b depict the hypothesized research model proposed in the present study.
Figure 1a. Proposed theoretical model: Materialism and socio-cultural factors’ influence on body satisfaction and fashion involvement
Figure 1b The decomposed proposed hypothesized research model
CHAPTER 3. METHOD

This chapter describes the methods employed to test the proposed research model (see Figures 1a & 1b). This study employed the widely used theoretical model in body image literature—the TIM to understand the influence of an individual’s level of body satisfaction on an individual’s consumption behavior (i.e., fashion involvement). Moreover, the present study extended the TIM by incorporating the materialism construct. Thus, the proposed research model (see Figures 1a & 1b) examined the role of cultural ideals internalization by an individual and its influence in the context of fashion consumption. Furthermore, the research model proposed that cultural ideals internalization by an individual is due to social antecedents, namely parents, peers, and mass media. The present study used quantitative methods to test the validity of the proposed research model.

A survey method (Blair, Czaja, & Blair, 2013; Couper, 2000; De Vaus, 2002; Dillman, 2000) was used to collect data. The following sections explain the methods used, which include sampling, survey instrument development, data collection, and data analyses. The proposed research model (Figures 1a & 1b) was empirically tested to meet the research objectives.

Sample

The sample for the present study was recruited through Amazon Mechanical Turk (AMT), an online data collection platform managed by Amazon, Inc. (for description see Paolacci, Chandler, & Ipeirotis, 2010). Several studies (Buhrmester, Kwang, & Gosling, 2011; Paolacci et al., 2010; Sprouse, 2011) have found that the data obtained through AMT were comparable to data collected from laboratory or Internet discussion boards. Consequently, Paolacci et al. (2010) noted that AMT should be considered “as a viable alternative for data collection” (p. 417).
Participants recruited for the present study were located in the U.S. and were 18 years and older. The survey was developed and hosted using Qualtrics—an online survey software. The survey was made available online through AMT, as a web link. The sampling method (i.e., AMT) used in the present study renders the finding more generalizable than most traditional methods (e.g., student sample), thereby increasing external validity (Berinsky, Huber, & Lenz, 2012).

The survey was conducted in two phases: Stage I and Stage II. In both phases, samples were accessed through AMT and each participant was paid nominal financial incentive for his or her participation. The initial survey instrument consisted of 112 items, which was deemed to be long. Researchers have maintained that longer scales should be shortened in order to reduce fatigue, frustration, and boredom associated with answering highly similar questions (Badgaiyan & Verma, 2014). Therefore, in Stage I data were collected to reduce the number of items related to research constructs. Stage I data collected was subjected to statistical analyses, which reduced the total number of items to 54 (see Chapter 4). Thus, the shorter version of the survey instrument derived from Stage I was employed to collect data for Stage II, which was used to test the proposed theoretical model.

Furthermore, steps were taken to ensure the quality of responses. For example, filter questions (e.g., there are 8 days in a week.) were included to make sure that the participants were paying attention to the survey. Using filter questions to screen survey response quality has been used in several research studies (e.g., While, Kelly, Huang, & Charlton, 1996). Likewise, to avoid order effect (see Grimm, 2010), in the second phase of data collection, randomization of blocks in the survey was employed. In other words, there were six versions of the survey with blocks of questions arranged in random order that were presented to the participants.
Data Collection

The survey was conducted in two phases: Stage I and Stage II. In both phases, samples were accessed through AMT and each participant was paid nominal financial incentive for his or her participation.

Stage I data collection

The initial survey instrument consisted of 112 items, which was deemed to be long. Badgaiyan and Verma (2014) maintained that longer scales should be shortened in order to reduce fatigue, frustration, and boredom associated with answering highly similar questions. Therefore, in Stage I data were collected from an AMT preliminary sample to reduce the number of items related to research constructs.

Stage I data were subjected to statistical analyses which reduced the total number of items to 54 (see Chapter 4). Thus, the shorter version of the survey instrument derived from Stage I was employed to collect data for Stage II, which was used to test the proposed theoretical model.

Stage II data collection

Adult participants, both male and female, located in the U.S., were recruited using Amazon.com, Inc.’s AMT. The survey link was posted on the AMT website. Before participants chose to undertake survey participation, they had access to information, such as study title, keywords, and a brief description of the study. To ensure that all participants were 18 years or older, the description stated: “must be 18+ to participate.” All participants were paid a nominal monetary incentive for their participation.
Survey Instrument

A web-based survey instrument (see Appendix A—longer version before data reduction; Appendix B—shorter version based on data reduction findings) was developed to assess the hypothesized relationships in the research model. The survey consisted of six sections, containing items related to *exogenous* and *endogenous* variables. An exogenous variable (e.g., materialism) is defined as a variable whose variation is assumed to be causally independent from the other variables in the model under construction (Pedhazur, 1997). An endogenous variable (e.g., fashion involvement) is a variable whose variability is explained by exogenous and other variables within the model (Pedhazur, 1997). Also, the survey included the demographic-related items of gender, age, ethnicity, educational level, employment status, and household income.

Prior to the beginning of each section, a short description of terms related to the purpose of the study (e.g., fashion) were provided to ensure that all respondents understood how terms were used in the survey instrument. Also, participants were asked to rate the survey items on a 7-point Likert-type scale ranging from (1) *strongly disagree* to (7) *strongly agree*. The list of items used in the surveys can be found in Appendices A & B.

Furthermore, steps were taken to ensure the quality of responses. For example, filter questions (e.g., “There are 8 days in a week.”) were included to make sure that the participants were paying attention to the survey. Using filter questions to screen survey response quality has been used in several studies (e.g., While, Kelly, Huang, & Charlton, 1996). Likewise, to avoid order effects (see Grimm, 2010), in the second phase of data collection randomization of blocks in the survey was employed. In other words, there were six versions of the survey with blocks of questions arranged in randomized order presented to the participants.
Measures

Sociocultural influence

Participants reported their perceived amount of pressure to be thin/lean from family, peers, and mass media on the Perceived Sociocultural Pressure Scale (PSPS) (Stice, 1998). Stice reported the reliabilities for family, peers, and mass media influence as 0.91, 0.86, and 0.89, respectively. Several studies (Stice, 2001; Stice & Agras, 1998; Stice & Whitenton, 2002) have employed the PSPS. For example, Stice and Agras (1998) employed the PSPS to study the onset and cessation of bulimic behavior among female adolescents in a longitudinal study. Stice and Agras (1998) reported that the PSPS demonstrates adequate internal consistency ($\alpha = .88$, independent pilot study; $\alpha = .83$ at Time 1).

Materialism

Materialistic values were measured with a 9-item shortened version of the Material Values Scale (MVS-SF) (Richins, 2004). This scale assessed the three components for materialism (Richins & Dawson, 1992): (1) the belief that possessions and their acquisition lead to happiness (e.g., “My life would be better if I owned certain things I don’t have”), (2) the use of possessions as a marker of one’s own and others’ successes (e.g., “The things I own say a lot about how well I'm doing in life”), and (3) the centrality of possessions in a person’s life (e.g., “I like a lot of luxury in my life”). The reliability of the 9-item MVS-SF scale has been reported to have acceptable psychometric properties ($\alpha = .84$, Richins, 2004). Studies (Ponchio & Aranha, 2008; Wei & Talpade, 2009) that employ MVS-SF have reported adequate reliability (e.g., $\alpha = .80$, Wei & Talpade, 2009).
Appearance comparison

The Physical Appearance Comparison Scale (PACS) consisted of five items to assess the tendency to compare oneself to others on different aspects of appearance (e.g., “In social situations, I sometimes compare my figure to the figures of other people”) (Thompson, Heinberg, & Tantleff-Dunn, 1991). The reliability of the PACS has been reported acceptable in several studies (e.g., $\alpha = .78$ in van den Berg et al., 2002).

Appearance internalization

Internalization of the thin (or lean) ideal was measured with eight items from the internalization subscale of the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ) (Heinberg, Thompson, & Stormer, 1995). The internalization subscale assessed the degree to which people have internalized the societal standards of attractiveness as self-relevant beliefs. The scale included items, such as “Women/Men who appear in TV shows and movies have the type of appearance I see as my goal.” Heinberg et al. (1995) reported SATAQ reliability as .88. Numerous studies (Cashel, Cunningham, Landeros, Cokley, & Muhammad, 2003; Ruggiero, Hannover, Mantero, & Papa, 2000) that employed SATAQ have reported acceptable reliabilities.

Level of body esteem

The Body Esteem Scale (BES) (Franzoi & Shields, 1984) was used to assess participants’ self-evaluation of their bodies. The BES consisted of 35 items, which assessed satisfaction with one’s body with regards to physical attractiveness, weight concerns, and physical condition adapted for men and women. Franzoi and Shields reported adequate reliability for the BES subscales ($\alpha > .70$).
Fashion involvement

Fashion Clothing Involvement (FCI) developed by O’Cass (2000) was adapted to measure fashion involvement. The FCI consisted of 44 items to measure various types of involvement: product involvement (e.g., “Fashion products mean a lot to me”), purchase decision involvement (e.g., “Making purchase decisions for fashion products is significant to me”), consumption involvement (e.g., “I like to think about wearing fashion products”), and advertising involvement (e.g., “I pay a lot of attention to ads for fashion products’’). O’Cass (2000) reported adequate reliabilities for all FCI subscales ($\alpha > .70$).

Pretest

Prior to collecting data, the survey instrument was pretested to ensure the face validity of the items (Nevo, 1985). A convenience sample of four graduate students from a large Midwestern university examined the wording of the survey items and the length of time each participant needed to complete the survey was recorded. Churchill and Lacobucci (2002) noted the importance of pretest in the context of survey instruments. They contend that a pretest should be used to assess the clarity of the items, as well as length, format, and instructions for the overall survey. Based on the results and comments from the pretest participants, some minor corrections were made to the survey prior to data collection.

Approval of Human Subjects Use

Prior to data collection, the Institutional Review Board (IRB) approval for this study was acquired (Appendix C). The survey instrument—along with the purpose of this study and cover letter requesting responses—were submitted for approval. The IRB determined that the rights and welfare of the human subjects were protected from any risks or discomfort to the participants. Voluntary participation and confidentiality of the data were assured.
Data Analyses

The proposed research model for the present study is based on research related to body satisfaction, materialism, and fashion involvement. Furthermore, the proposed research model included sociocultural antecedents of cultural ideals internalization. Thus, together with sociocultural antecedents responsible for cultural ideals internalization, the study was directed to understand an individual’s fashion involvement. Empirical understandings of the various relationships proposed in the research model will not only increase our understanding of human consumption behavior, but also have several practical implications (e.g., see Chapter 1). The data analyses were conducted in two phases—preliminary analyses and causal-model analysis. Statistical Package for the Social Sciences (SPSS) version 20 and MPlus version 7.11 (Muthén & Muthén, 2010) statistical software packages are utilized.

Preliminary analyses

The preliminary analyses consisted of multiple steps (see Chapter 4 for more details). As noted earlier, data were collected in two stages. The original survey instrument consisted of 112 items, which is long (see Appendix A). Several scholars (e.g., Badgaiyan & Verma, 2014) have noted that longer surveys lead participants to experience fatigue, frustration, and boredom. Therefore, the objective of the first stage of data collection was to reduce the number of items in the survey instrument. Based on statistical analyses, the survey items were reduced to 54 items to form the survey for the second stage of data collection (see Appendix B). The second stage data collected were subjected to statistical analyses that tested the proposed research model. The preliminary analyses for the data collected in the second stage consisted of factor analysis, construct validity, internal consistency, descriptive statistics, and correlations.
Causal model analysis

The proposed model was tested through structural equation modeling (SEM), which permitted examination of path structures of the latent model. The overall fit of the model to the data was examined through chi-square statistics, the comparative-fit index (CFI), Tucker-Lewis Index (TLI), and the root mean square error of approximation (RMSEA). By convention, models within a good fit have fit statistics above 0.90 for CFI, TLI and below .05 for RMSEA (Hu & Bentler, 1999; Kline, 2005).
CHAPTER 4. RESULTS

This chapter contains the results for the study—preliminary data analysis (i.e., Stage I data collection) and final data analysis (i.e., Stage II data collection). The preliminary data were collected in Stage I with the sole purpose of reducing the number of items included in the final survey. The data obtained in this stage were analyzed to include descriptive statistics, factor structures of measures, and reliability analyses. The data obtained during Stage II were analyzed to describe sample characteristics and reliability of all measures. Confirmatory factor analysis (CFA) and structural equation modeling (SEM) were performed to confirm factor structure and test the measurement model and causal models. Finally, results of supplementary analyses, such as establishment of measurement invariance and analysis of variance (ANOVA), are discussed.

Preliminary Data Analysis

Sample and data collection

The data were collected using Amazon Mechanical Turk. All participants were adults (i.e., 18 years or older) located in the U.S. In total, 207 responses were collected. However, only 177 responses were deemed usable based on survey completion rate as well as correctly answering filter questions (e.g., there are 8 days in a week) that were included in the survey instrument. Furthermore, the respondents’ time was considered into account. On average the time spent to respond to the survey instrument was 11 minutes and 9 seconds. Responses from the participants who spent less than 4 minutes to complete the survey were deleted. At this stage, each participant was paid 50 cents for their participation.

Demographic profile of the sample

The geographic location of the survey participants was the US. The sample consisted of a higher percentage of female respondents (110; 62.1%) than male respondents (67; 37.9%). The mean age for the respondents was 28 with a range of 18 to 73 years. Approximately 43% of the
respondents held a bachelor’s degree or higher. In terms of ethnic background, a majority of the sample were White or European American (75.1%), followed by Asian American or Pacific Islanders (11.3%), and Black or African-American (9%); the remainder were either Hispanic or Latino (6.2%), Native American (2.8%), or other ethnicities (0.6%). The sample consisted of a range of household income levels. A majority of the sample (61.2%) reported their household income was less than US$50,000 annually. Additionally, 31.5% respondents reported that their household income in the range of US$50,001 – US$100,000. Also, most of the respondents were employed for wages (43.5%), followed by self-employed (18.6%), student (13%), out of work and looking for work (7.8%), homemaker (7.9%) and other (e.g., retired or unable to work; 9.2%). See Table 1.

To explore further, data were subjected to a series of chi-square tests. First, chi-square was conducted to check if there was any difference due to gender by age range among the participants. Results revealed that there was no significant difference related to gender and age range (Pearson chi-square = .372; Likelihood ratio = .085; Cramer’s V = .372). Next, chi-square was conducted on gender by education level. Results revealed that there was no significant difference related to gender and education level (Pearson chi-square = 4.299; df = 3; Likelihood ratio = .231; Cramer’s V = .231). Finally, differences between gender and household income were performed. Results revealed that there was no significant difference (Pearson chi-square = .841; df = 3; Likelihood ratio = .757; Cramer’s V = .840).

Statistical analyses

The purpose of the preliminary data collection was to reduce the number of items defining latent variables in the proposed model. In other words, during the preliminary stage, data were collected with the sole intention of item reduction with the aim of shortening longer
scales to reduce fatigue, frustration, and boredom associated with answering highly similar questions (Badgaiyan & Verma, 2014). Also, shorter versions of scales can be as valid as their longer versions because they tend to eliminate item redundancy (Bergkvist & Rossiter, 2007).

The item reduction procedure was conducted, based on two important criteria: (1) item-total correlations with the full scales (thus, favoring more central over more peripheral item content) and (2) simple-structure pattern of item loadings in factor analysis of their respective scales (thus, favoring items uniquely related to the focal factor) (Rammstedt & John, 2007). Therefore, the original survey questionnaire consisting of 112 items was reduced to 54 items, based on the pretest involving 177 participants. Additionally, Cronbach’s alphas were calculated to test the reliability of the shorter versions of the instruments developed. All factors demonstrated adequate reliability (i.e., alpha > .70; Nunnally, 1978). Table 2 depicts Cronbach’s alphas for the original scales as well as the shorter versions of the scales.
Table 1. Demographic Characteristics of the Sample (n = 177)

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<td>Bachelor’s Degree</td>
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<td>35</td>
</tr>
<tr>
<td></td>
<td>Master’s/Professional</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Employment Status</td>
<td>Employed for Wages</td>
<td>77</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Self-Employed</td>
<td>33</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Out of Work/Looking</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Out of Work/Not Looking</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Homemaker</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Military</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Retired</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Unable to Work</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Household Income</td>
<td>Below US$50,000</td>
<td>109</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Between US$50,000 – 100,000</td>
<td>56</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Between US$100,000 – 200,000</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Above US$200,000</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 2. Reliabilities of the original and shortened forms of measurement scales

<table>
<thead>
<tr>
<th>Construct</th>
<th>Original Number of Items</th>
<th>Final Number of Items</th>
<th>Original Cronbach Alpha</th>
<th>New Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-cultural factor: Parents</td>
<td>4</td>
<td>4</td>
<td>.90</td>
<td>.90</td>
</tr>
<tr>
<td>Socio-cultural factor: Peers</td>
<td>4</td>
<td>4</td>
<td>.93</td>
<td>.93</td>
</tr>
<tr>
<td>Socio-cultural factor: Media</td>
<td>4</td>
<td>4</td>
<td>.97</td>
<td>.97</td>
</tr>
<tr>
<td>Materialism</td>
<td>9</td>
<td>9</td>
<td>.90</td>
<td>.90</td>
</tr>
<tr>
<td>Appearance Internalization</td>
<td>20</td>
<td>5</td>
<td>.88</td>
<td>.87</td>
</tr>
<tr>
<td>Appearance Comparison</td>
<td>11</td>
<td>5</td>
<td>.97</td>
<td>.96</td>
</tr>
<tr>
<td>Product Involvement</td>
<td>15</td>
<td>5</td>
<td>.99</td>
<td>.97</td>
</tr>
<tr>
<td>Purchase Decision</td>
<td>9</td>
<td>5</td>
<td>.97</td>
<td>.96</td>
</tr>
<tr>
<td>Consumption Involvement</td>
<td>8</td>
<td>4</td>
<td>.97</td>
<td>.96</td>
</tr>
<tr>
<td>Advertisement Involvement</td>
<td>5</td>
<td>4</td>
<td>.85</td>
<td>.86</td>
</tr>
<tr>
<td>Body Esteem Scale</td>
<td>23</td>
<td>5</td>
<td>.95</td>
<td>.94</td>
</tr>
</tbody>
</table>

**Final Sample Data Analysis**

**Sample and data collection**

The data were collected through Amazon Mechanical Turk. All participants were adults (i.e., 18 years or older) located in the U.S. The survey consisted of six sections, which included the demographic items. Furthermore, due to the sensitive nature of the topic, the survey questionnaire was presented in six different configurations to minimize any biases in responses that could be attributed to survey question order effects (see McFarland, 1981). In total, 524 responses were collected. However, only 472 responses were deemed usable based on survey completion rate as well as correctly answering filter questions (e.g., there are 8 days in a week) that were included in the survey instrument. Thus, the data collected from 472 respondents were used for statistical analyses. The average time per respondent to complete the questionnaire was 7 minutes 34 seconds. At this stage, each participant was paid 40 cents for their participation.
Demographic profile of the sample

The sample consisted of a higher percentage of male respondents (274; 58.5%) than female respondents (198; 41.5%). The mean age of the respondents was 28, with a range of 18 to 66 years. Approximately 50% of the respondents held a bachelor’s degree or higher. In terms of ethnic background, a majority of the sample were White or European American (73.7%), followed by Asian American, Asian, or Pacific Islanders (12.5%), and Black or African American (8.9%); the rest were either Hispanic or Latino (5.1%), Native Americans (1.9%), or other (1%).

This sample included a range of household income levels. The majority of the sample (55%) reported that their household income was less than US$50,000 annually. Additionally, 34.3% of the respondents reported their household income in the range of US$50,001 – US$100,000. Also, most of the respondents were employed for wages (48.6%), followed by students (17.6%), self-employed (14.5%), out of work or looking for work (9.6%), homemaker (5.3%) and others (e.g., retired or unable to work; 4.4%). The demographic profile of the sample is summarized in Table 3.

To explore further, data were subjected to series of chi-square tests. First, chi-square was conducted to check if there was any difference related to gender by age range among the participants. Results revealed that there was no significant difference between gender and age range (Pearson chi-square = .204; Likelihood ratio = .062; Cramer’s V = .204). Next, chi-square was conducted on gender by education level. Results revealed that there was no significant difference related to gender and education level (Pearson chi-square = .897; df = 3; likelihood ratio = .824; Cramer’s V = .826). Finally, differences between gender and household income
were performed. Results revealed that there was no significant difference (Pearson chi-square = 1.30; df = 3; likelihood ratio = .728; Cramer’s V = .729).

There were some commonalities and differences related to sample composition related to Stage I and Stage II. For example, in Stage I, female respondents (62%) were the majority, whereas in Stage II male respondents (58.5%) were the majority. Participants in both stages had several similarities. For example, the average age of participants in both the stages was 28 years, and the age ranges were similar (Stage I: 18 – 73; Stage II: 18 – 66). As far as the household income is concerned, in both the samples, household income less than US$50,000 annually represented the majority of the participants’ responses (Stage I: 61% vs. Stage II: 55%). Likewise, the participants in both the samples had similar educational background. For example, a majority of the participants reported having at least a bachelor’s degree or higher (Stage I: 43% vs. Stage II: 50%). Also, the ethnic backgrounds of the participants were similar (e.g., Whites/European American—Stage I: 75% vs. Stage II: 74%). Number of other ethnicities was similar across both the samples. For example, in Stage I, 6.2% of the participants identified themselves as Hispanic or Latino, whereas in Stage II, 5.1% identified themselves in that ethnicity.

To explore further the differences between the samples, chi-square was conducted to test for differences. Gender differences between the samples were significant (Pearson chi-square = 22.94; df = 1; p = 0.000; likelihood ratio = 0.0001; Cramer’s V = 0.0001). As far as the household income between the two samples is concerned, there were no statistical differences (Pearson chi-square = 2.836; df = 3; likelihood ratio = .400; Cramer’s V = .418). Furthermore, the racial makeup of both the samples were similar (Pearson chi-square = 10.0; df = 10; likelihood ratio = .179; Cramer’s V = .440).
Table 3. Demographic Characteristics of the Sample (n = 472)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>276</td>
<td>58.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>193</td>
<td>48.2</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Euro-American</td>
<td>348</td>
<td>71.5</td>
</tr>
<tr>
<td></td>
<td>African-American</td>
<td>42</td>
<td>8.6</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>24</td>
<td>4.9</td>
</tr>
<tr>
<td></td>
<td>Asian/Pacific Islander</td>
<td>59</td>
<td>12.1</td>
</tr>
<tr>
<td></td>
<td>Native American</td>
<td>9</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td>Education</td>
<td>High School Diploma</td>
<td>170</td>
<td>36.4</td>
</tr>
<tr>
<td></td>
<td>Associate’s Degree</td>
<td>63</td>
<td>13.5</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s Degree</td>
<td>183</td>
<td>39.2</td>
</tr>
<tr>
<td></td>
<td>Master’s/Professional</td>
<td>51</td>
<td>10.9</td>
</tr>
<tr>
<td>Employment Status</td>
<td>Employed for Wages</td>
<td>228</td>
<td>48.6</td>
</tr>
<tr>
<td></td>
<td>Self-Employed</td>
<td>68</td>
<td>14.5</td>
</tr>
<tr>
<td></td>
<td>Out of Work/Looking</td>
<td>45</td>
<td>9.6</td>
</tr>
<tr>
<td></td>
<td>Out of Work/Not Looking</td>
<td>5</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Homemaker</td>
<td>25</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>83</td>
<td>17.7</td>
</tr>
<tr>
<td></td>
<td>Military</td>
<td>2</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>Retired</td>
<td>6</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>Unable to Work</td>
<td>7</td>
<td>1.5</td>
</tr>
<tr>
<td>Household Income</td>
<td>Below US$50,000</td>
<td>258</td>
<td>55.0</td>
</tr>
<tr>
<td></td>
<td>Between US$50,000 – 100,000</td>
<td>161</td>
<td>34.3</td>
</tr>
<tr>
<td></td>
<td>Between US$100,000 – 200,000</td>
<td>45</td>
<td>9.6</td>
</tr>
<tr>
<td></td>
<td>Above US$200,000</td>
<td>5</td>
<td>1.1</td>
</tr>
</tbody>
</table>
There were some differences and some similarities between the general US population and the Stage II sample. For example, the gender makeup of the Stage II sample (male = 59%) does not represent the US national sample, which is 50% female according to the US Census Bureau (2013). Persons younger than 18 years were excluded from the sample, whereas only 76% of the US population is 18 years and over. A chi-square test was conducted to compare the final sample’s ethnicities with that of the US population. The analysis revealed that there was no significant difference between the sample and the US population in terms of ethnicity (Pearson chi-square = 12.00; df = 11; likelihood ratio = .119; Cramer’s V = .364). However, the raw percentages indicate some differences that are not reflected in the overall chi-square.

White/European Americans are slightly over-represented in the sample. Asian/Asian Americans and Pacific Islanders were more than double in the study sample in comparison to the percent in the US population. Black/African Americans, Latino/Hispanic Americans, and Others (e.g., bi-racial) are greatly under-represented.

*Table 4. Comparison of ethnicity across samples and the US Census*

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Sample I (%)</th>
<th>Sample II (%)</th>
<th>U.S. Census (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>European American</td>
<td>76</td>
<td>71</td>
<td>64</td>
</tr>
<tr>
<td>African American</td>
<td>9</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>6</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>Asian American/Pacific Islander</td>
<td>11</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Native American</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Others (e.g., Bi-racial)</td>
<td>1</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

*percentages rounded to the closest whole number.

**Overall mean scores on the research variables**

The central tendency (i.e., mean), distribution (i.e., standard deviation), along with the minimum and maximum values for each research variable are reported in Table 5. The research variables are sociocultural factors (i.e., family, peers, and mass media), materialism, appearance internalization, appearance comparison, body satisfaction, and fashion involvement (i.e., product
involvement, purchase decision involvement, consumption involvement, and advertisement involvement).

Table 5. Summated Mean Scores of Research Variables \((n = 177—Sample 1; n = 472—Sample 2)\)

<table>
<thead>
<tr>
<th>Constructs/Items</th>
<th>Mean(1)</th>
<th>SD(1)</th>
<th>Mean(2)</th>
<th>SD(2)</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sociocultural: Parents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I feel pressure from family members to look thinner/leaner.</td>
<td>2.92</td>
<td>1.89</td>
<td>2.79</td>
<td>1.79</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>- I feel pressure from family members to improve my appearance.</td>
<td>3.05</td>
<td>1.85</td>
<td>2.98</td>
<td>1.80</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>- Family members encourage me to decrease my level of body fat.</td>
<td>3.14</td>
<td>1.93</td>
<td>3.08</td>
<td>1.93</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>- Family members encourage me to get in better shape.</td>
<td>3.72</td>
<td>1.92</td>
<td>3.65</td>
<td>1.93</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td><strong>Sociocultural: Peers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- My peers encourage me to get thinner/leaner.</td>
<td>3.08</td>
<td>1.76</td>
<td>2.97</td>
<td>1.75</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>- I feel pressure from my peers to improve my appearance.</td>
<td>3.19</td>
<td>1.77</td>
<td>3.07</td>
<td>1.73</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>- I feel pressure from my peers to look in better shape.</td>
<td>3.26</td>
<td>1.84</td>
<td>3.15</td>
<td>1.79</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>- I get pressure from my peers to decrease my level of body fat.</td>
<td>2.91</td>
<td>1.79</td>
<td>2.80</td>
<td>1.71</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td><strong>Sociocultural: Media</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I feel pressure from the media to look in better shape.</td>
<td>4.62</td>
<td>1.99</td>
<td>4.25</td>
<td>2.03</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>- I feel pressure from the media to look thinner/leaner.</td>
<td>4.54</td>
<td>2.07</td>
<td>4.17</td>
<td>2.09</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>- I feel pressure from the media to improve my appearance.</td>
<td>4.73</td>
<td>2.01</td>
<td>4.38</td>
<td>2.05</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>- I feel pressure from the media to decrease my level of body fat.</td>
<td>4.53</td>
<td>2.13</td>
<td>4.15</td>
<td>2.09</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td><strong>Materialism</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I admire people who own expensive homes, cars, and clothes.</td>
<td>3.58</td>
<td>1.81</td>
<td>3.86</td>
<td>1.88</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>- I try to keep my life simple, as far as possessions are concerned.*</td>
<td>5.15</td>
<td>1.39</td>
<td>3.21</td>
<td>1.53</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>- My life would be better if I owned certain things I don’t</td>
<td>4.31</td>
<td>1.79</td>
<td>4.70</td>
<td>1.72</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>
have.
- Buying things gives me a lot of pleasure. 4.22 1.83 4.53 1.56 1 7
- I’d be happier if I could afford to buy more things. 4.47 1.79 4.93 1.69 1 7
- I like to own things that impress people. 3.06 1.84 3.45 1.86 1 7
- I like a lot of luxury in my life. 3.36 1.86 3.74 1.81 1 7
- It sometimes bothers me quite a bit that I can’t afford to buy all the things I’d like. 4.50 1.82 4.63 1.80 1 7
- The things I own say a lot about how well I’m doing in life. 3.67 1.74 3.82 1.80 1 7

### Appearance Internalization
- I think a lot about looking muscular or thin. 3.94 1.68 4.78 1.72 1 7
- I want my body to look very chiseled or thin. 4.40 1.69 4.80 1.71 1 7
- I think a lot about looking athletic. 3.49 1.70 4.55 1.80 1 7
- I want my body to look very lean. 4.40 1.69 4.89 1.58 1 7
- Photographs of thin/lean women/men make me wish that I were thin/lean. 4.09 1.75 4.46 1.86 1 7

### Appearance Comparison
- When I’m at work or school, I compare my body shape to the body shape of others. 4.23 1.84 4.27 1.85 1 7
- When I’m out in the public, I compare my body fat to the body fat of others. 4.13 1.89 4.54 1.82 1 7
- When I’m with a group of friends, I compare my weight to the weight of others. 4.07 1.92 4.44 1.87 1 7
- When I’m out in public, I compare my body size to the body size of others. 4.26 1.93 4.61 1.82 1 7
- When I’m with a group of friends, I compare my body size to the body size of others. 4.13 1.93 4.49 1.86 1 7

### Body Satisfaction
- I wish I looked better.* 3.02 1.49 2.78 1.55 1 7
- My looks upset me.* 4.18 1.74 4.42 1.83 1 7
- I’m pretty happy about the way
<table>
<thead>
<tr>
<th>I look.</th>
<th>4.19</th>
<th>1.45</th>
<th>4.13</th>
<th>1.68</th>
<th>1</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>- I think I have a good body.</td>
<td>4.05</td>
<td>1.57</td>
<td>3.97</td>
<td>1.73</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>- I’m looking as nice as I’d like to.</td>
<td>3.98</td>
<td>1.62</td>
<td>3.33</td>
<td>1.59</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

**Product Involvement**

| - Fashion is a significant part of my life. | 2.96 | 1.68 | 3.05 | 1.74 | 1 | 7 |
| - I have a very strong commitment to fashion that would be difficult to break. | 2.72 | 1.68 | 2.52 | 1.52 | 1 | 7 |
| - For me personally fashion clothing is an important product. | 2.98 | 1.81 | 2.94 | 1.70 | 1 | 7 |
| - Fashion is important to me. | 3.02 | 1.79 | 3.09 | 1.79 | 1 | 7 |
| - I am very much involved in/with fashion. | 2.71 | 1.69 | 2.64 | 1.65 | 1 | 7 |

**Purchase Decision Involvement**

| - I think a lot about my choices when it comes to fashion. | 3.35 | 1.89 | 3.24 | 1.79 | 1 | 7 |
| - Purchase decisions related to fashion are very important to me. | 3.24 | 1.82 | 3.13 | 1.78 | 1 | 7 |
| - I attach great importance to purchasing fashion products. | 3.10 | 1.82 | 2.76 | 1.67 | 1 | 7 |
| - The purchase of fashion products is important to me. | 3.07 | 1.76 | 2.80 | 1.67 | 1 | 7 |
| - Purchasing fashion products is significant to me. | 2.97 | 1.71 | 2.80 | 1.68 | 1 | 7 |

**Consumption Involvement**

| - The feeling of self-fulfillment I get from wearing fashion products is significant. | 3.15 | 1.87 | 3.06 | 1.84 | 1 | 7 |
| - I like to think about wearing fashion products. | 3.11 | 1.81 | 3.11 | 1.86 | 1 | 7 |
| - Wearing fashionable products is important to me. | 2.93 | 1.79 | 2.92 | 1.68 | 1 | 7 |
| - Wearing fashion products means a lot to me. | 2.71 | 1.69 | 2.85 | 1.68 | 1 | 7 |

**Advertisement Involvement**

| - I pay a lot of attention to ads for fashion products. | 2.99 | 1.77 | 2.63 | 1.67 | 1 | 7 |
| - Ads about fashion products are relevant to me. | 2.91 | 1.72 | 2.59 | 1.60 | 1 | 7 |
| - Ads about fashion products are important to me. | 2.73 | 1.64 | 2.45 | 1.54 | 1 | 7 |
Table 6 presents the correlations between latent variables included in the model. All but one correlation was statistically significant. The correlation between body satisfaction and fashion involvement failed to reach statistical significance. Other correlation coefficients between the research variables suggest the research variables were low to moderately correlated with each other. The highest correlation ($r = 0.63$) was found between appearance comparison and appearance internalization. The results from the correlation matrix were utilized to establish validity for the measures (Hair, Anderson, Tatham, & Black, 1992).

**Table 6. Correlations among Research Variables (n = 472)**

<table>
<thead>
<tr>
<th>Constructs</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociocultural Factors</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materialism</td>
<td>.25*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance Internalization</td>
<td>.49*</td>
<td>.42*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance Comparison</td>
<td>.56*</td>
<td>.35*</td>
<td>.63*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Satisfaction</td>
<td>-.43*</td>
<td>-.24*</td>
<td>-.37*</td>
<td>-.52*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fashion Involvement</td>
<td>.25*</td>
<td>.38*</td>
<td>.28*</td>
<td>.26*</td>
<td>.03</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note: * $p \leq .01$

**Reliabilities of the measurement scales**

The Cronbach’s *alphas* were calculated to examine the reliability of the scales used in the final data analysis. Consistent with the preliminary data analysis results, all factors demonstrated adequate reliability (i.e., $\alpha > .70$; Nunnally, 1978). Table 7 presents the Cronbach’s *alphas* for the shorter versions of the scales used in the final data analysis.
Table 7. Reliabilities of the Measurement Scale in the Main Study

<table>
<thead>
<tr>
<th>Construct</th>
<th>Number of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-cultural factor: Parents</td>
<td>4</td>
<td>.91</td>
</tr>
<tr>
<td>Socio-cultural factor: Peers</td>
<td>4</td>
<td>.93</td>
</tr>
<tr>
<td>Socio-cultural factor: Media</td>
<td>4</td>
<td>.97</td>
</tr>
<tr>
<td>Materialism</td>
<td>9</td>
<td>.90</td>
</tr>
<tr>
<td>Appearance Internalization</td>
<td>5</td>
<td>.90</td>
</tr>
<tr>
<td>Appearance Comparison</td>
<td>5</td>
<td>.95</td>
</tr>
<tr>
<td>Product Involvement</td>
<td>5</td>
<td>.96</td>
</tr>
<tr>
<td>Purchase Decision</td>
<td>5</td>
<td>.97</td>
</tr>
<tr>
<td>Consumption Involvement</td>
<td>4</td>
<td>.96</td>
</tr>
<tr>
<td>Advertisement Involvement</td>
<td>4</td>
<td>.92</td>
</tr>
<tr>
<td>Body Esteem Scale</td>
<td>5</td>
<td>.89</td>
</tr>
</tbody>
</table>

Confirmatory factor analysis

The aim of confirmatory factor analysis (CFA) is to crosscheck construct dimensionality and to provide an assessment of the measurement model’s fit. Model assessment was undertaken using standard procedures (Anderson & Gerbing, 1998) to evaluate the model’s fit using multiple fit statistics. The chi-squared statistic is an absolute measure of model fit. However, the chi-squared statistic ($\chi^2$) is sensitive to sample size (> 200), complex models, or models with a large number of indicators (Hoelter, 1993). Following the recommendations by Joerskog and Sorborn (1993), other fit indices were also evaluated to determine how well the model fit the data.

Root Mean Square Error of Approximation (RMSEA) is the index of absolute fit important to evaluate the model’s fit. RMSEA measures how well the model would fit the population covariance matrix at the 95% confidence interval (Browne & Cudeck, 1993). Index values of less than 0.06 indicate a good fit, while values ranging from 0.08 to 0.10 are moderately acceptable (Byrne, 1998). A value approaching 0 demonstrates a perfect fit. Other incremental fit indices used for model assessment (Muthén & Muthén, 2010) included the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI). A perfect fit for incremental...
indices is 1.0; in cases where CFI is less than 1, it should be always greater than TLI (Bentler, 1990). Anderson and Gerbing (1998), Bentler (1990), Byrne (2008), and Hu and Bentler (1999) served as a guide for cutoff values (i.e., CFI > .90, RMSEA < .08, SRMR < .08, and TLI > .90).

The model that was tested consisted of several sociocultural factors (i.e., parents, peers, and mass media) as well as the substantive variables of materialism, appearance internalization, appearance comparison, body satisfaction, and fashion involvement (i.e., advertisement involvement, consumption involvement, product involvement, and purchase decision involvement). In order to improve the fit of the model to the data an initial set of analyses was conducted to develop parcels for the latent variables included in the model. A parcel is an aggregate-level indicator that may be calculated by either summing or averaging two or more items, responses, or behaviors (Little, Cunningham, Shahar, & Widaman, 2002). Bagozzi and Heatherton (1994) suggested using parceling to reduce the number of model parameters to be estimated and to enhance the stability of parameter estimates, especially with small samples. Parceling has been utilized in numerous empirical studies to obtain item distributions that are more continuous and normal. Many studies using this technique have also demonstrated better fit of models to the data (Bagozzi & Heatherton, 1994; Gribbons & Hocevar, 1998; Takahashi & Nasser, 1996). Furthermore, CFA models based on parcels have been shown to possess greater power and smaller mean squared errors than analyses based on the individual items (Bandalos, 2002). Consistently, the parceling technique yielded a measurement model with a superior fit ($\chi^2 = 825.051$, $df = 305$, $p = 0.0001$, CFI = .958, TLI = 0.951, RMSEA = 0.064, SRMR = 0.055), which was further used in causal modeling (i.e., SEM).
Table 8. Factor Loading of the Items used in the Study

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Factor Loading</th>
<th>Eigen Value</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sociocultural: Parents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I feel pressure from family members to look thinner/leaner.</td>
<td>2.79</td>
<td>1.78</td>
<td>.92</td>
<td>3.16</td>
<td>78.89%</td>
</tr>
<tr>
<td>- I feel pressure from family members to improve my appearance.</td>
<td>2.98</td>
<td>1.80</td>
<td>.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Family members encourage me to decrease my level of body fat.</td>
<td>3.08</td>
<td>1.93</td>
<td>.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Family members encourage me to get in better shape.</td>
<td>3.65</td>
<td>1.93</td>
<td>.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sociocultural: Peers</strong></td>
<td>3.33</td>
<td>83.29%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- My peers encourage me to get thinner/leaner.</td>
<td>2.97</td>
<td>1.75</td>
<td>.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I feel pressure from my peers to improve my appearance.</td>
<td>3.07</td>
<td>1.73</td>
<td>.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I feel pressure from my peers to look in better shape.</td>
<td>3.15</td>
<td>1.79</td>
<td>.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I get pressure from my peers to decrease my level of body fat.</td>
<td>2.80</td>
<td>1.71</td>
<td>.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Materialism</strong></td>
<td>4.94</td>
<td>54.94%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I admire people who own expensive homes, cars, and clothes.</td>
<td>3.86</td>
<td>1.87</td>
<td>.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I try to keep my life simple, as far as possessions are concerned.*</td>
<td>3.21</td>
<td>1.53</td>
<td>.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- My life would be better if I owned certain things I don’t have.</td>
<td>4.70</td>
<td>1.71</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- Buying things gives me a lot of pleasure.  
  - I’d be happier if I could afford to buy more things.  
  - I like to own things that impress people.  
  - I like a lot of luxury in my life.  
  - It sometimes bothers me quite a bit that I can’t afford to buy all the things I’d like.  
  - The things I own say a lot about how well I’m doing in life.  

<table>
<thead>
<tr>
<th>Appearance Internalization</th>
<th>3.607</th>
<th>72.13%</th>
</tr>
</thead>
<tbody>
<tr>
<td>- I think a lot about looking muscular or thin.</td>
<td>4.78</td>
<td>1.72</td>
</tr>
<tr>
<td>- I want my body to look very chiseled or thin.</td>
<td>4.80</td>
<td>1.71</td>
</tr>
<tr>
<td>- I think a lot about looking athletic.</td>
<td>4.55</td>
<td>1.80</td>
</tr>
<tr>
<td>- I want my body to look very lean.</td>
<td>4.89</td>
<td>1.57</td>
</tr>
<tr>
<td>- Photographs of thin/lean women/men make me wish that I were thin/lean.</td>
<td>4.46</td>
<td>1.85</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appearance Comparison</th>
<th>4.21</th>
<th>84.29%</th>
</tr>
</thead>
<tbody>
<tr>
<td>- When I’m at work or school, I compare my body shape to the body shape of others.</td>
<td>4.27</td>
<td>1.85</td>
</tr>
<tr>
<td>- When I’m out in the public, I compare my body fat to the body fat of others.</td>
<td>4.54</td>
<td>1.82</td>
</tr>
<tr>
<td>- When I’m with a group of friends, I compare my weight to the weight of others.</td>
<td>4.44</td>
<td>1.86</td>
</tr>
</tbody>
</table>
- When I’m out in public, I compare my body size to the body size of others.  
  4.61 1.82 .94
- When I’m with a group of friends, I compare my body size to the body size of others.  
  4.49 1.86 .93

<table>
<thead>
<tr>
<th>Body Satisfaction</th>
<th>3.48</th>
<th>69.72%</th>
</tr>
</thead>
</table>
| - I wish I looked better.*  
  2.78 1.54 .78 |
| - My looks upset me.*  
  4.42 1.83 .79 |
| - I’m pretty happy about the way I look.  
  4.13 1.67 .88 |
| - I think I have a good body.  
  3.97 1.72 .88 |
| - I’m looking as nice as I’d like to.  
  3.33 1.59 .83 |

<table>
<thead>
<tr>
<th>Product Involvement</th>
<th>4.31</th>
<th>86.24%</th>
</tr>
</thead>
</table>
| - Fashion is a significant part of my life.  
  3.05 1.74 .94 |
| - I have a very strong commitment to fashion that would be difficult to break.  
  2.52 1.52 .90 |
| - For me personally fashion clothing is an important product.  
  2.94 1.69 .94 |
| - Fashion is important to me.  
  3.09 1.78 .93 |
| - I am very much involved in/with fashion.  
  2.64 1.65 .93 |

<table>
<thead>
<tr>
<th>Purchase Decision Involvement</th>
<th>4.39</th>
<th>87.90%</th>
</tr>
</thead>
</table>
| - I think a lot about my choices when it comes to fashion.  
  3.24 1.79 .90 |
| - Purchase decisions related to fashion are very important to me.  
  3.13 1.77 .93 |
| - I attach great importance to purchasing fashion  
  2.76 1.66 .96 |
Following CFA, a structural equation modeling (SEM) was conducted to test the proposed model. Based on the measurement model, a fully recursive model and hypothesized research model were specified to explore the directional relationship between constructs involved in the proposed research model. A fully recursive model is a path model in which all
causal relationships flow in one direction with no reciprocal effects of feedback loops (Byrne, 2008). Reduced or hypothesized models are special cases of fully recursive models, where some paths (between variables) are hypothesized to be zero and the directional relationship between the constructs are specified (Creswell, 2008).

**Hypothesized research model testing**

The hypothesized relationships in the proposed model (Figures 1a & 1b) were tested through the structural model of SEM. Since $\chi^2$ is sensitive to sample size, other goodness of fit indices (i.e., CFI, TLI, RMSEA, and SRMR) were also reported. Although the chi-square statistic for the structural equation model was significant ($\chi^2 = 865.542, df = 310, p = 0.0001$), other fit indices indicated an acceptable level of fit (CFI = .955, TLI = .949, RMSEA = .065, SRMR = .076). Figure 2 provides the standardized path coefficients ($\beta$) for the hypothesized paths in the proposed model.
Figure 2. The proposed research model with the standardized path coefficients

*indicates significant paths at $p < 0.01$
With one exception the results were consistent with the hypothesized model. $H5$ proposed a negative relationship between appearance internalization and level of body satisfaction. However, this relationship did not reach statistical significance ($\beta = -0.043, p = 0.542$). Tables 9 and 10 illustrate the results.

*Table 9. Summary of support for hypotheses based on the results of SEM*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>Hypothesized Effect</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H1$</td>
<td>Sociocultural Factors $\rightarrow$ Appearance Comparison</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H1(a)$</td>
<td>Parental Pressure $\rightarrow$ Appearance Comparison</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H1(b)$</td>
<td>Peer Pressure $\rightarrow$ Appearance Comparison</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H1(c)$</td>
<td>Media Pressure $\rightarrow$ Appearance Comparison</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H2$</td>
<td>Sociocultural Factors $\rightarrow$ Appearance Internalization</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H2(a)$</td>
<td>Parental Pressure $\rightarrow$ Appearance Internalization</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H2(b)$</td>
<td>Peer Pressure $\rightarrow$ Appearance Internalization</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H2(c)$</td>
<td>Media Pressure $\rightarrow$ Appearance Internalization</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H3$</td>
<td>Appearance Comparison $\rightarrow$ Appearance Internalization</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H4$</td>
<td>Appearance Comparison $\rightarrow$ Body Satisfaction</td>
<td>-</td>
<td>Supported</td>
</tr>
<tr>
<td>$H5$</td>
<td>Appearance Internalization $\rightarrow$ Body Satisfaction</td>
<td>-</td>
<td>Not Supported</td>
</tr>
<tr>
<td>$H6$</td>
<td>Body Satisfaction $\rightarrow$ Fashion Involvement</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H7$</td>
<td>Sociocultural Factors $\rightarrow$ Materialism</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H7(a)$</td>
<td>Parental Pressure $\rightarrow$ Materialism</td>
<td>+</td>
<td>Not Supported</td>
</tr>
<tr>
<td>$H7(b)$</td>
<td>Peer Pressure $\rightarrow$ Materialism</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H7(c)$</td>
<td>Media Pressure $\rightarrow$ Materialism</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H8$</td>
<td>Materialism $\rightarrow$ Appearance Comparison</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H9$</td>
<td>Materialism $\rightarrow$ Appearance Internalization</td>
<td>+</td>
<td>Supported</td>
</tr>
<tr>
<td>$H10$</td>
<td>Materialism $\rightarrow$ Fashion Involvement</td>
<td>+</td>
<td>Supported</td>
</tr>
</tbody>
</table>
Table 10. Additional paths in the decomposed model

<table>
<thead>
<tr>
<th>Path</th>
<th>Estimate (β)</th>
<th>S.E.</th>
<th>Est./S.E.</th>
<th>Two-Tailed p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Pressure → Materialism</td>
<td>0.079</td>
<td>0.060</td>
<td>1.308</td>
<td>0.191</td>
</tr>
<tr>
<td>Peer Pressure → Materialism</td>
<td>0.134*</td>
<td>0.066</td>
<td>2.031</td>
<td>0.042</td>
</tr>
<tr>
<td>Media Pressure → Materialism</td>
<td>0.139*</td>
<td>0.057</td>
<td>2.458</td>
<td>0.014</td>
</tr>
<tr>
<td>Parental Pressure → Appearance Comparison</td>
<td>0.157**</td>
<td>0.049</td>
<td>3.172</td>
<td>0.002</td>
</tr>
<tr>
<td>Peer Pressure → Appearance Comparison</td>
<td>0.141**</td>
<td>0.055</td>
<td>2.563</td>
<td>0.010</td>
</tr>
<tr>
<td>Media Pressure → Appearance Comparison</td>
<td>0.419**</td>
<td>0.044</td>
<td>9.497</td>
<td>0.000</td>
</tr>
<tr>
<td>Parental Pressure → Appearance Internalization</td>
<td>0.117*</td>
<td>0.056</td>
<td>2.080</td>
<td>0.038</td>
</tr>
<tr>
<td>Peer Pressure → Appearance Internalization</td>
<td>0.211**</td>
<td>0.062</td>
<td>3.422</td>
<td>0.001</td>
</tr>
<tr>
<td>Media Pressure → Appearance Internalization</td>
<td>0.297**</td>
<td>0.052</td>
<td>5.677</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note: * p < .05; ** p < .01

Fully recursive model testing

To reiterate, a fully recursive model includes all possible paths along with the proposed hypotheses paths among the model constructs. The parameters were estimated, based on SEM. The hypothesized research model consisted of six latent variables with 10 hypotheses. However, the fully recursive model consists of 15 hypotheses. Although the fully recursive model had a significant $\chi^2$ along with the other indices, the model was considered to demonstrate adequate fit ($\chi^2 = 825.051$, $df = 305$, $p = 0.000$, CFI = .96, TLI = 0.95, RMSEA = 0.064, SRMR = 0.055).

The fully recursive model had 5 $df$ less than the hypothesized model and the $\chi^2$ for the fully recursive model was 40.49 less than that of the hypothesized model. The $\chi^2$ difference was significant. Therefore, the fully recursive model is moderately better than the hypothesized model. Of the five paths not proposed (i.e., the additional paths in the fully recursive model), only two paths reached statistical significance and three paths were non-significant. The paths that reached statistical significance were sociocultural factors positively related to fashion.
involvement ($\beta = 0.255, p = 0.001$) and negatively related to body esteem ($\beta = -0.236, p = 0.002$). Furthermore, the relationships among the following variables failed to reach statistical significance: fashion involvement is not related to appearance internalization ($\beta = -0.008, p = 0.915$) and appearance comparison ($\beta = 0.126, p = 0.110$). Also, body esteem was not related to the individual level of materialism ($\beta = -0.038, p = 0.470$). Additionally, two paths that reached statistical significance in the SEM of the proposed model failed to reach statistical significance in the fully recursive SEM model. These paths are the relationships between materialism and appearance comparison ($\beta = -0.072, p = 0.362$), and materialism and sociocultural factors ($\beta = 0.047, p = 0.543$). Figure 3 provides standardized path coefficients ($\beta$) and significance levels for the paths in the fully recursive model.

**Alternate model testing**

To achieve a more parsimonious model, Kline (2005) recommends specifying an alternate model. Re-specification of the model should primarily be completed, based on theoretical assumptions and should ideally be *a priori* (Kenny, 1999). In this study, modification of the hypothesized model is guided by theory, results of CFA, and diagnostic checks of the original structural model. Again, the hypothesized model is deemed to have an acceptable fit ($\chi^2 = 865.542, df = 310, p = 0.000$, CFI = .955, TLI = .949, RMSEA = .065, SRMR = .076). However, to develop a better fit of the hypothesized model, an alternate model was proposed (see Figure 4). In the alternate model, some paths were fixed to 0, which indicated no relationship between the constructs. Based on the initial structural model testing, some paths were deleted (e.g., sociocultural factors and materialism) and some paths were added (e.g., sociocultural factors and fashion involvement). The additional paths were based on theory,
which could be justified (see Chapter 5). The alternate model is superior to the hypothesized model in many ways.

First, the fit indices for the alternate model are ($\chi^2 = 830.869$, $df = 311$, $p = 0.000$, CFI = .958, TLI = .952, RMSEA = .063, SRMR = .055), which are better than the hypothesized model fit indices (and comparable to the fully recursive model). Also, the chi-squared difference between the two models is significant ($\Delta \chi^2 = 34.673$, $\Delta df = 1$). Second, all path coefficients (i.e., $\beta$s) are significant and most of them are stronger in magnitude than the hypothesized model. Finally, the squared multiple correlations ($R^2$) for latent constructs were much improved compared to the initial hypothesized model (and the fully recursive model). For example, the $R^2$ for fashion involvement per the hypothesized model was 19.9%; whereas, for the alternate model $R^2$ was 27% (vs. the fully recursive model at 26.7%).
Figure 3. The Fully Recursive Research Model with the Standardized Path Coefficients

*indicates significant paths at $p < 0.01$; dashed line – insignificant paths
Figure 4. The alternate research model with the standardized path coefficients

*indicates significant paths at $p < 0.01$
Supplementary Analysis

Gender moderation

Prior research has indicated gender differences related to key constructs in the proposed model, such as materialism (e.g., Ryan & Dziurawiec, 2001) and body satisfaction/esteem (e.g., Pingitore, Spring, & Garfieldt, 1997). Therefore tested the validity of the proposed model across gender groups. First, measurement invariance must be tested so that factor loadings can be compared across gender groups, if the measures have the same meaning in the relevant groups. Measurement invariance refers to equivalence of a measured construct in two or more groups (Chen, 2008). Therefore, only after testing for measurement invariance is there a possibility for comparison across groups, as far as the proposed hypothesized model is concerned (Davidov, 2008). Therefore, CFAs were conducted with unconstrained and constrained models for each gender group. The fit indices for constrained and unconstrained CFA models are ($\chi^2 = 642.710$, $df = 300$, $p = 0.000$, $CFI = .95$, $TLI = 0.94$, $RMSEA = 0.076$, $SRMR = 0.067$) and ($\chi^2 = 648.696$, $df = 288$, $p = 0.000$, $CFI = .94$, $TLI = 0.93$, $RMSEA = 0.079$, $SRMR = 0.08$), respectively. Additionally, the $\chi^2$ difference test was conducted (Cheung & Rensvold, 2002). The $\chi^2$ difference between constrained and unconstrained models is 5.986 for 12 $df$, which is non-significant. Therefore, the measurement invariance was established. Consequently, the hypothesized research model is comparable across gender groups. Table 11 depicts the path coefficients for male and female groups.

Analysis of variance

To explore further, additional analyses were conducted, based on gender. Analysis of variance (ANOVA) was conducted to test whether significant differences existed among these two groups with the six variables—sociocultural pressure, materialism, appearance
internalization, appearance comparison, body esteem, and fashion involvement. Results for ANOVA are reported in Table 12.

Prior to conducting the ANOVA, the correlations among the dependent variables were observed to test the ANOVA assumption that the dependent variables would be correlated with each other moderately (Meyers, Gamst, & Guarino, 2006). Moderate correlations were observed between the dependent variables (.20 to .70). Based on Levene’s test, the homogeneity for variance assumption was considered satisfied, even though three of six Levene’s tests were statistically significant ($p \leq .05$). Specifically, examination of the standard deviations revealed that none of the largest standard deviations were more than four times the size of the corresponding smallest standard deviations; the analysis of variance (ANOVA) would be robust in this case (Howell, 2007).
Table 11. Summary of support for hypotheses based on the results of SEM across gender groups

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>Male (β) (t-Value)</th>
<th>Female (β) (t-Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1</strong></td>
<td>Sociocultural Factors → Appearance Comparison</td>
<td>(0.532) (8.505)</td>
<td>(0.594) (8.365)</td>
</tr>
<tr>
<td><strong>H2</strong></td>
<td>Sociocultural Factors → Appearance Internalization</td>
<td>(0.045) (0.585)</td>
<td>(0.352) (3.407)</td>
</tr>
<tr>
<td><strong>H3</strong></td>
<td>Appearance Comparison → Appearance Internalization</td>
<td>(0.616) (9.447)</td>
<td>(0.377) (4.024)</td>
</tr>
<tr>
<td><strong>H4</strong></td>
<td>Appearance Comparison → Body Satisfaction</td>
<td>(−0.492) (−5.117)</td>
<td>(−0.484) (−5.229)</td>
</tr>
<tr>
<td><strong>H5</strong></td>
<td>Appearance Internalization → Body Satisfaction</td>
<td>(−0.110) (−1.057) [NS]</td>
<td>(−0.096) (−0.950) [NS]</td>
</tr>
<tr>
<td><strong>H6</strong></td>
<td>Body Satisfaction → Fashion Involvement</td>
<td>(0.167) (2.591)</td>
<td>(0.209) (2.954)</td>
</tr>
<tr>
<td><strong>H7</strong></td>
<td>Sociocultural Factors → Materialism</td>
<td>(0.373) (5.345)</td>
<td>(0.428) (5.433)</td>
</tr>
<tr>
<td><strong>H8</strong></td>
<td>Materialism → Appearance Comparison</td>
<td>(0.226) (3.545)</td>
<td>(0.213) (3.189)</td>
</tr>
<tr>
<td><strong>H9</strong></td>
<td>Materialism → Appearance Internalization</td>
<td>(0.273) (4.839)</td>
<td>(0.152) (2.113)</td>
</tr>
<tr>
<td><strong>H10</strong></td>
<td>Materialism → Fashion Involvement</td>
<td>(0.455) (7.708)</td>
<td>(0.579) (9.429)</td>
</tr>
</tbody>
</table>

*NS*: Non-significant
Table 12. ANOVA test results for the research variable based on gender

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC_P</td>
<td>20.911</td>
<td>1</td>
<td>20.911</td>
<td>11.124</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>859.049</td>
<td>457</td>
<td>1.880</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>879.960</td>
<td>458</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA_P</td>
<td>5.849</td>
<td>1</td>
<td>5.849</td>
<td>3.517</td>
<td>.061</td>
</tr>
<tr>
<td></td>
<td>755.043</td>
<td>454</td>
<td>1.663</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>760.892</td>
<td>455</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI_P</td>
<td>1.639</td>
<td>1</td>
<td>1.639</td>
<td>.766</td>
<td>.382</td>
</tr>
<tr>
<td></td>
<td>984.735</td>
<td>460</td>
<td>2.141</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>986.374</td>
<td>461</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC_P</td>
<td>35.828</td>
<td>1</td>
<td>35.828</td>
<td>12.840</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>1297.529</td>
<td>465</td>
<td>2.790</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1333.357</td>
<td>466</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE_P</td>
<td>34.420</td>
<td>1</td>
<td>34.420</td>
<td>18.468</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>853.627</td>
<td>458</td>
<td>1.864</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>888.047</td>
<td>459</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FI_P</td>
<td>43.800</td>
<td>1</td>
<td>43.800</td>
<td>20.156</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>973.516</td>
<td>448</td>
<td>2.173</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1017.316</td>
<td>449</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: SC_P: Sociocultural Pressure; MA_P: Materialism; AI_P: Appearance Internalization; AC_P: Appearance Comparison; BE_P: Body Satisfaction; FI_P: Fashion Involvement*
CHAPTER 5. SUMMARY AND CONCLUSIONS

Researchers (Ashikali & Dittmar, 2012; Bell, 2011; Easterbrook et al., 2014; Gudnadottir & Gardarsdottir, 2014) have noted the influence of cultural ideals’ internalization (i.e., the body perfect and the material good life) and its influence on individuals’ behavior and well-being. The findings from the present study extend previous findings, in that it explored cultural ideals internalization and its influence on individuals’ fashion consumption behavior. Furthermore, the present study successfully employed a widely used theoretical model in body image literature—the TIM in the context of fashion consumption. Moreover, the TIM was extended to include the materialism construct as well. This chapter summarizes the study and discusses its results. Conclusions, implications, and limitations of this study are presented, and recommendations for future research are discussed.

Summary of Research

The purpose of the present study was to extend previous research in three ways: (1) to explore the relationships between the body perfect ideal and the material good life ideal, (2) to explore sociocultural antecedents of cultural ideals internalization, and (3) to explore the relationships between cultural ideals internalization and fashion consumption for both men and women.

To meet the study’s objectives, literature pertaining to body satisfaction, materialism, and fashion involvement were reviewed. The relationships between the three constructs and additional constructs (e.g., sociocultural factors) were incorporated in the research model for this study. The Tripartite Influence Model (TIM) formed the basis of the proposed hypothesized research model.

The proposed hypothesized research model was empirically tested using structural equation modeling. Data were collected in two phases from U.S. adult (18 years and older)
samples. Participant responses ($n = 177$) were employed to reduce the measures to fewer items and establish construct validity; then the research model was tested. Responses from 472 participants were utilized to test the proposed hypothesized research model. The data were tested using an array of statistical analyses, which also included CFA and SEM. Moreover, an additional model—the alternate model—that best fits the data was also tested. Additionally, some supplementary analyses (e.g., gender moderation) were conducted.

### Summary of Results

The hypothesized research model consisted of ten hypotheses. Based on empirical analyses and testing, the findings are discussed as follows.

$H1$ proposed that sociocultural factors (i.e., parents, peers, and mass media) will positively influence appearance comparison, such that perceived level of parental pressure to attain the body perfect ideal is positively related to appearance comparison ($H1a$), perceived level of peer pressure to attain the body perfect ideal is positively related to appearance comparison ($H1b$), and perceived level of mass media pressure to attain the body perfect ideal is positively related to appearance comparison ($H1c$). In general, $H1$ was supported ($\beta = 0.56, p < 0.001$). Moreover, $H1a$ ($\beta = 0.157, p = 0.002$), $H1b$ ($\beta = 0.141, p = 0.01$), and $H1c$ ($\beta = 0.419, p = 0.0001$) were supported. The support of hypotheses is consistent with previous studies which noted the role of sociocultural factors influence on an individual’s tendency to engage in appearance comparison (e.g., Durkin & Paxton, 2002; Hargreaves & Tiggemann, 2004; Jones, 2001). In the present study, mass media was the strongest influencing factor among sociocultural variables, in the context of an individual’s tendency to engage in appearance comparison. This finding is consistent with other research studies (e.g., Mazur, 1986; Thompson & Heinberg, 1999). For instance, Thompson and Heinberg noted, “although sociocultural
pressures may be exerted by a variety of sources, it has been suggested that the mass media are the most potent and pervasive communicators of sociocultural standards” (p. 340).

*H2* proposed that the sociocultural factors (i.e., parents, peers, and mass media) will positively influence appearance internalization, such that the perceived level of parental pressure to attain the body perfect ideal is positively related to appearance internalization (*H2a*), perceived level of peer pressure to attain the body perfect ideal is positively related to appearance internalization (*H2b*), and perceived level of mass media pressure to attain the body perfect ideal is positively related to appearance internalization (*H2c*). In general, *H2* was supported (*β* = 0.18, *p* < 0.01). The subordinate hypotheses *H2a* (*β* = 0.117, *p* = 0.038), *H2b* (*β* = 0.297, *p* = 0.001), and *H2c* (*β* = 0.297, *p* = 0.0001) also were supported. Again, in the present study, it was determined that mass media was the strongest influencing factor among sociocultural variables in the context of an individual’s tendency to engage in appearance internalization. This finding is consistent with other studies related to the TIM (Keery et al., 2004). For instance, Keery et al. examined the validity of the TIM in the context of adolescent girls’ body dissatisfaction and eating disorders. They found that in their mediational analysis, mass media has the strongest influence on an individual’s level of appearance internalization (*β* = 0.71, *p* < 0.01; vs. parents *β* = 0.40, *p* < 0.01 and peers *β* = 0.40, *p* < 0.01).

*H3* proposed that appearance comparison will be positively related to appearance internalization. In the present study, *H3* was supported (*β* = 0.492, *p* < 0.01). This finding is consistent with other studies that employed the TIM model (e.g., Keery et al., 2004; Shroff & Thompson, 2006).

*H4* proposed that appearance comparison would be negatively related to an individual’s level of body esteem. The finding of the present study supported *H4* (*β* = -0.523, *p* < 0.01). This
finding is consistent with other studies, which employed the TIM model (e.g., Keery et al., 2004; Shroff & Thompson, 2006). For example, Shroff and Thompson (2006) found that the relationship between appearance comparison and body dissatisfaction was positive ($\beta = 0.17, p < 0.01$). The measure used in the present study was of body esteem, strongly related to the body satisfaction concept.

$H5$ proposed that appearance internalization is negatively related to an individual’s level of body esteem. In the present study, $H5$ was not supported ($\beta = -0.043, p < 0.19$). Although the beta coefficient had the proposed direction, it failed to reach statistical significance. This finding contradicts the findings of several TIM related studies (Keery et al., 2006). However, some studies have reported similar findings. For example, Knauss, Paxton, and Alsaker (2008) conducted an empirical study related to body dissatisfaction among adolescent boys and girls. They found that unlike girls, for boys, the relationship between appearance internalization and body dissatisfaction failed to reach a statistically significant level. Likewise, in the present study, the sample consisted of both men and women, and the proposed model was tested in combination, thereby obfuscating the clear relationship between the aforementioned constructs for men as well as women. Gender differences are summarized below.

$H6$ proposed that an individual’s level of body esteem is related to one’s fashion involvement. The nature (i.e., negative or positive) of the relationship was not specified, due to two competing (and diametrically opposite) explanations proposed in the literature (Kim, 2008 vs. Rosa et al., 2006). However, in the present study, the relationship between the aforementioned two constructs was determined to be positive ($\beta = 0.133, p < 0.01$). This finding is consistent with the perspective that an individual with high body esteem is more confident to engage in enhancing his/her self-concept through high involvement in appearance-related
activities. This finding is consistent with studies (e.g., Rosa et al., 2006) that found a positive relationship between body esteem and fashion involvement.

*H7* proposed that sociocultural factors (i.e., parents, peers, and mass media) will positively influence an individual’s level of materialism, such that the perceived level of parental pressure to attain the body perfect ideal is positively related to an individual’s level of materialism (*H7a*), perceived level of peer pressure to attain the body perfect ideal is positively related to an individual’s level of materialism (*H7b*), and perceived level of mass media pressure to attain the body perfect ideal is positively related to an individual’s level of materialism (*H7c*). It is important to note, to date the relationship between specific sociocultural factors’ perceived level of the body perfect ideal and individual’s level of materialism has not been tested. Overall, *H7* was supported (*β* = 0.133, *p* < 0.01). In particular, *H7b* (*β* = 0.134, *p* = 0.042) and *H7c* (*β* = 0.139, *p* = 0.014) were supported. However, *H7a* was not supported (*β* = 0.079, *p* = 0.19).

Studies (e.g., Easterbrook et al., 2014) found the two ideals—the body prefect and the material good life—are correlated. Likewise, previous studies (e.g., Shroff & Thompson, 2006) found that parents had minimal (to no) influence on adolescent girls’ body dissatisfaction when compared to peers and mass media. It is possible, and found in this study, that parental pressure to attain the body perfect ideal has minimal influence on an individual’s level of materialism. The negligible relationship between parental pressure and individual’s level of materialism can be explained. It has been postulated that during the formative years, parental influence on an individual’s level of body satisfaction is strong. However, this relationship begins to dwindle as individuals reach puberty. During adolescent years, parent pressure is replaced by peer pressure (Jones, 2011). Therefore, in the present study, the sample consisted of adults who might not experience parent pressure anymore. On the other hand, peers and media did influence body
esteem. The aforementioned proposition is true even in the context of adults. For example, eating disorder theorists and feminist scholars have long indicted mass media as a source of disordered eating among women (Thompson & Heinberg, 1999). Numerous studies (e.g., Ashikali & Dittmar, 2012) have established relationships between the perfect body and body satisfaction among both males and females. Likewise, the relationship between the perfect body and body dissatisfaction due to peer pressure has been explored (e.g., Vincent & McCabe, 1999). Topics related to food and dieting are often discussed with one’s peers or friends (Oliver & Thelen, 1996), perhaps lending peers influence over how individuals think about the body well into adulthood.

H8 proposed that an individual’s level of materialism will be positively related to one’s tendency to engage in appearance comparison. In the present study, H8 was supported (β = 0.208, p < 0.01). This finding is consistent with other studies (e.g., Ashikali & Dittmar, 2012), which have noted that individualistic materialistic tendencies make one more susceptible to appearance or social comparison. As noted previously, the relationship is obvious because both cultural ideals are related to extrinsic goal attainment. Thus, Ashikali and Dittmar noted that materialistic value entails not only image and looking good, but also money and expensive possessions. Consistent with self-discrepancy theory (see Higgins, 1987; see also Cooley, 1902; Freud, 1923; Rogers, 1961), in Ashikali and Dittmar’s experiment, when individual were exposed to materialistic images, appearance centrality or body-related self-discrepancies or both were heightened. Thus, Ashikali and Dittmar concluded that a materialism prime can lead to appearance comparison, which is connected to one’s self-concept within the domain of physical appearance.
H9 proposed that an individual’s level of materialism will be positively related to one’s degree of appearance internalization. The findings from the present study supported H9 (β = 0.237, p < 0.01). This result is consistent with the findings by Ashikali and Dittmar (2012). Ashikali and Dittmar noted that the two cultural ideals—the body perfect and the material good life—are intertwined, and appearance and image are core elements of materialism (see also Dittmar, 2008).

H10 proposed that an individual’s level of materialism will be positively related to one’s degree of fashion involvement. In the present study, H10 was supported (β = 0.457, p < 0.01). This finding is consistent with other studies (Browne & Kaldenberg, 1997), which found an individual’s level of materialism is positively associated with product involvement. As per Dittmar’s Consumer Culture Impact Model (2008), the two cultural ideals are related. Therefore, if one is invested in materialistic behavior, they are also likely to invest in the domain of physical appearance. Indeed, the body is a site of displaying possessions (Veblen, 1899). Also, clothing is referred to as a “second skin,” which underscores its importance in conveying one’s self-concept—physically as well as symbolically.

In summary, the hypothesized research model proposed ten hypotheses. Of the ten hypotheses, all but one was supported. Also, the $R^2$ for the proposed hypothesized research model for the fashion involvement construct equaled 19.9%, which is significant at the $p <= 0.0001$ level.

**Gender differences**

Several constructs involved in the present study have been noted to vary by gender. For example, studies have found gender differences in the context of individual materialism (Belk, 1984; Beutel & Marini, 1995; Bryce & Olney, 1991; Ryan & Dziurawiec, 2001). Similarly,
gender differences have been noted in the context of fashion involvement (Browne & Kaldenberg, 1997; O’Cass, 2000). Finally, gender differences have been noted in body image/body satisfaction literature (Ogden & Mundray, 1996; Tiggemann & Williamson, 2000). Consequently, gender differences were explored in the present study.

First, to test the validity of the proposed hypothesized research model across genders, measurement invariance was checked. Statistical tests revealed that the proposed hypothesized research model was applicable for both male and female samples. Accordingly, multi-group SEM was performed. Table 1 depicts the various path coefficients for the hypothesized research models comparing males and females.

$H2$ proposed that the socio-cultural factors (i.e., parents, peers, and mass media) are positively related to appearance internalization. However, $H2$ was supported for females ($\beta = 0.352, t = 3.407$), but not for males ($\beta = 0.045, t = 0.585$). More specifically, parents ($\beta = -0.027, t = 0.470$), peers ($\beta = 0.035, t = 0.540$), and mass media ($\beta = 0.033, t = 0.556$) did not influence appearance internalization for male participants. On the other hand, only mass media ($\beta = 0.154, t = 1.862$) influenced appearance internalization for female respondents (parents, $\beta = 0.070, t = 0.846$; peers, $\beta = 0.116, t = 1.331$). Some studies have reported similar findings. For example, Ata, Ludden, and Lally (2007) and Ricciardelli and McCabe (2004) have noted that sociocultural influences might differ across gender. Ricciardelli and McCabe noted that a significant number of studies have focused solely on males and failed to establish relationships between parents and peers with body dissatisfaction. Overall, the findings related to $H2$ contradict most of the literature.

However, some alternate explanations can be provided. Thompson and Heinberg (1999) reported that sociocultural influences on appearance internalization might differ across gender.
For example, according to a survey conducted by *Psychology Today*, 23% of female respondents reported that television or movie celebrities influenced their body image when they were young. Furthermore, 22% of female respondents reported that they recognized the influence of fashion magazines (Garner, 1997). However, only 13% and 6% of men mentioned that movie/television celebrities and fashion models influenced their own body image perceptions. In another example, both male and female participants were exposed to fashion models from popular fashion magazines in an experiment conducted by Kolodner (1997). Kolodner (1997) reported that women exposed to fashion models reported significantly higher level of private body self-consciousness and anxiety than the control group. On the other hand, there were no significant effects in the case of male participants (cf. Thornton & Moore, 1993).

It is proposed that self-esteem (or its subcomponent body-esteem) plays an important role in an individual’s level of body satisfaction. However, Furnham, Badmin, and Sneade (2002) found some gender differences related to body satisfaction. They reported that the concept of self-esteem was tied to body satisfaction for girls, but not so in the case of boys. Also, it has been reported that in general women tend to be more highly dissatisfied with their bodies than are men (Furnham et al., 2002; see also Muth & Cash, 1997), which can be attributed to level of internalization of the perfect body ideal. Similarly, Jones, Vigfusdottir, and Lee (2004) analyzed sociocultural influences and relationships with appearance internalization and body dissatisfaction among boys and girls. They reported that the proposed mediated relationship of sociocultural influences (e.g., media) and body dissatisfaction via appearance internalization was confirmed only in the case of girls, but not boys. Therefore, based on the literature reviewed, it is logical that $H2$ was supported for females but not males. Moreover, many body-image related studies have been conducted on preadolescents (e.g., Wood, Becker, & Thompson, 1996) and
adolescents (e.g., Morrison, Kalin, & Morrison, 2004). However, few studies have been conducted using adult samples (e.g., Ashikali & Dittmar, 2012), who were the main participants in the present study.

Likewise, parents and peers had less influence on appearance internalization for women possibly because of several reasons. For example, mass media exposure has been positively correlated with body dissatisfaction among girls/women (Thompson & Heinberg, 1999). Also, considering the study sample, who were adults (mean age = 28), it is likely that parent and peer pressure wane as women progress into adulthood. Also, the contradictory findings related to $H_2$ might be due to the comparatively smaller sample size of women. In sum, future research should focus on adults’ gender differences in appearance internalization via sociocultural factors. Furthermore, the relationship between age and appearance internalization (and body satisfaction) needs to be explored. For example, in the present study, a bivariate correlation analysis was conducted between age and body esteem. The correlation was statistically significant, such that there was a small but negative relationship ($r = -.15, p = 0.01$), indicating that as age increases, body esteem decreases.

$H_5$ proposed that appearance internalization is negatively related to body esteem. For both males ($\beta = -0.11, t = 1.057$) and females ($\beta = -0.096, t = 0.950$), $H_5$ was not supported. Although, the magnitude of the beta coefficients is in the proposed direction, they failed to reach statistical significance. This finding contradicts all previous existing literature. An alternative explanation is not attempted, but it is suspected that the wide age range of study participants (20s to 70s) might have contributed to this anomalous finding. For example, McCabe and Ricciardelli (2004) noted that body satisfaction varies across an individual’s life span. Also, as noted earlier,
there seems to be a relationship between age and body satisfaction. Again, future studies should address this issue.

**Alternate Research Model**

The hypothesized model was deemed an acceptable fit ($\chi^2 = 865.542$, $df = 310$, $p = 0.0001$, $CFI = .955$, $TLI = .949$, $RMSEA = .065$, $SRMR = .076$). However, to develop the fit for this hypothesized model, an alternate model was proposed. In the alternate model, some of paths were fixed to 0, which indicated no relationship between the constructs. Based on the initial structural model testing, some paths were deleted (e.g., between sociocultural factors and materialism) and some paths were added (e.g., between sociocultural factors and fashion involvement). The addition of paths was based on theory which could be justified (Keery et al., 2004). For example, Keery et al. (2004) proposed that the TIM should incorporate a direct relationship between sociocultural factors and the body satisfaction outcome variable. The fit indices for the alternate model in the present study were ($\chi^2 = 830.869$, $df = 311$, $p = 0.000$, $CFI = .958$, $TLI = .952$, $RMSEA = .063$, $SRMR = .055$), which were better than the hypothesized model fit indices and comparable to the fully recursive model. In total, there were nine paths included in the alternate research model. All path coefficients were statistically significant. Furthermore, the variance explained (i.e., $R^2$) for the fashion involvement construct increased from 19.9% in the hypothesized research model to 27% in the alternate research model. Hence, the alternate model adds to understanding of most of the relationships proposed.

**Gender differences**

Several constructs related to the hypothesized model have been proposed to vary across gender. For example, gender differences have been found in case of materialism (Ryan & Dziurawiec, 2001) and body satisfaction (e.g., Ogden & Mundrey, 1996). Therefore, a series of
analyses of variance (ANOVA) examining gender differences among the various constructs in
the present study were performed. There were no gender differences found for appearance
internalization \((F(1, 461) = 2.141, p = 0.382)\). The aforementioned finding is consistent with the
findings of Morry and Staska (2001). Morry and Staska (2001) found that men and women who
read fashion/fitness magazines tended to internalize the body perfect ideal. In the alternate
model for this study, there was a borderline gender difference in individual materialism \((F(1, 455) = 5.849, p = 0.061)\), with women having a greater level of materialism than men. This
finding is consistent with previous studies (e.g., Workman & Lee, 2011). For example,
Workman and Lee (2011) conducted a cross-cultural study; they found that females were more
materialistic than males among Americans and Koreans. For all other constructs involved,
women scored higher than men—perceived sociocultural pressure to attain the body perfect ideal
\((F(1, 458) = 20.911, p = 0.001)\), appearance comparison \((F(1, 466) = 35.828, p = 0.0001)\), level
of body esteem \((F(1, 459) = 34.420, p = 0.0001)\), and fashion involvement \((F(1, 449) = 43.800, p = 0.0001)\). The aforementioned findings are consistent with previous studies conducted (e.g.,
O’Cass, 2000; Wichstrom, 1999). For example, O’Cass (2000) found that women were more
involved with fashion than were men.

Conclusions

This study was the first to explore the interconnection of relationships among
materialism, body satisfaction/esteem, and fashion involvement. Furthermore, the study
proposed potential antecedents for the aforementioned constructs from sociocultural
perspectives. This study employed the TIM, a widely used theoretical model, to understand
body image-related concerns. Jones (2011) noted that the TIM has the potential to explain
diverse body image-related concerns. Thus, the TIM was employed in the present study to
understand individuals’ fashion consumption—for both males and females. The proposed hypothesized research model was empirically tested, which yielded successful results. Not only were 9 of 10 proposed hypotheses supported, but also, the model explained 19.9% variance in the fashion involvement construct and 27% with the alternative, improved model (significant at $p = 0.001$).

Research in recent years has started to explore the role of cultural ideals internalization—the body perfect and the material good life—and its influence on individual behavior (Ashikali & Dittmar, 2012; Easterbrook et al., 2014). These cultural ideals are not only related (Ashikali & Dittmar, 2012), but extreme levels of cultural ideals internalization is detrimental to individual well-being (Easterbrook et al., 2014). To this end, the goal of the present study was to understand the influence of body image and materialism cultural ideals’ internalization on individuals’ consumption behavior, more specifically, to understand individuals’ fashion consumption behaviors. The present study has some theoretical and practical implications.

The overall findings of the present study confirmed that cultural ideals internalization is not only detrimental to an individual’s well-being (Easterbrook et al., 2014), in this study assessed by body esteem, but also has an impact on individual’s consumption behaviors, specifically fashion consumption. This study largely confirmed the TIM model, which is widely used in body image research to understand body image disturbances (e.g., anorexia, bulimia nervosa, excessive dieting, muscle dysmorphia, and steroid use) and the dark side of consumption (Mick, 1996). The dark side of consumption refers to negative consumption behaviors, which include topics such as materialism, compulsive buying, shoplifting, drug and alcohol addiction, gambling, and prostitution (Mick, 1996). While the present study did not address the dark side of consumption, it did definitely address the topics of materialism and
body-esteem that, when taken to extremes, are detrimental to well-being. These were found to have a relationship to consumption of and involvement in fashion, which at extreme levels may be an indicator of problems with well-being. Thus, the present study demonstrates that the TIM model can also be employed to understand consumption behavior; dark side or otherwise.

Results from the present study also confirm previous findings (Keery et al., 2004; Shroff & Thompson, 2006; Smolak, Murnen, & Thompson, 2005; Yamamiya et al., 2008). For example, the three sociocultural factors—parents, peers, and mass media—influence an individual’s level of body satisfaction via two mediating mechanisms—appearance comparison and appearance internalization. However, the present study found relationships that addressed gaps in the literature that have not been previously explored. For example, per the present study findings, perceived pressure from sociocultural factors to attain the body perfect ideal can also lead an individual to be more materialistic, which has been linked to a host of negative outcomes (e.g., Ghadrian, 2010; Manchiraju, 2013).

Implications

The findings from the present study complement Dittmar’s (2008) Consumer Culture Impact Model. Although, Dittmar’s model did not propose antecedents for cultural ideals internalization, the present study explored the Consumer Culture Impact Model’s potential contributing factors from a sociocultural perspective. Thus, the present study can also be viewed as an extension of the Consumer Culture Impact Model, as well as the TIM. Consistent with both models, in the present study it was found that both materialistic and body perfect cultural ideals internalization was related to body satisfaction and fashion consumption. Additionally, parents, peers, and mass media were main contributing factors for an individual’s level of the cultural ideals internalization.
According to the TIM proposition—sociocultural influence on body satisfaction is completely mediated by the two mediating mechanisms—appearance internalization and appearance comparison. However, in the present study it was found that sociocultural factors did not influence indirectly through the mediating factors but influenced an individual’s level of body satisfaction/esteem directly in a statistically significant positive direction. This finding is consistent with other studies (Keery et al., 2004) that proposed certain modifications be made to the TIM model. One of the modifications Keery et al. proposed was that the TIM should also include a direct path from sociocultural factors to body satisfaction. I make that recommendation also.

The present study is also unique in the sense it is the first of its kind to test the proposed model for both men and women. To date, only three studies (Ashikali & Dittmar, 2012; Bell, 2011; Gudnadottir & Gardarsdottir, 2014) have focused on the relationship between the cultural ideals of the body perfect and the material good life internalization and body satisfaction. Two of these studies (Ashikali & Dittmar, 2012; Bell, 2011) have focused exclusively either on girls or women. Although Gudnadottir and Gardarsdottir (2014) tested their model among Icelandic males and females, they employed different scales for both groups. Thus, the model proposed was not tested across gender.

The present study has some practical implications. The findings from the present study will be useful to advertisers, marketers, media activists, and body image disturbance intervention programs. In the following paragraphs, some practical implications of the study are discussed.

Although media (e.g., fashion magazines, television, and advertising) have long been blamed for their advocacy of the body perfect ideal (Thompson & Heinberg, 1999) as well as the material good life ideal (Richins, 1987), scholars (e.g., Levine & Smolak, 1998) contend that
advertisers and marketers may also provide one of the most successful venues for prevention of cultural ideals perpetuation and their negative consequences. One path is through social marketing, which refers to “the adaptation of commercial marketing technologies to programs designed to influence the voluntary behavior of target audience to improve their personal welfare and that of society of which they are a part” (Andreasen, 1994, p. 110). In other words, social marketing is a process that aims to change specific behavior in a specific segment of the population (Thompson & Heinberg, 1999). For example, social marketing campaigns have been designed to modify community levels of blood cholesterol (e.g., Pawtucket Heart Health Program studies by Lefebvre & Flora, 1988) and to enhance the general public’s physical activity levels (e.g., Center for Disease Control and Prevention, 1997; Thompson & Heinberg, 1999).

Consequently, the concept of social marketing has been mentioned in the context of body image (Levine & Smolak, 1998). However, to develop a successful social marketing campaign, Thompson and Heinberg (1999) noted that it is important to understand characteristics and needs of the target market. Therefore, the present study is useful to advertisers and marketers to help identify the driving factors which lead to internalization of cultural ideals and the negative behavior resulting from them, thus, helping advertisers and marketers to develop effective (social) marketing campaigns.

The findings from the present study will also be of interest to media activists and developers of body image education and prevention campaigns (Bell, 2011; Gudnadottir & Gardarsdottir, 2014; Jasper, 1993; Levine, Piran, & Stoddard, 1999; Thompson & Heinberg, 1999; Yager & O’Dea, 2008). Media activism refers to “protesting (or conversely praising)
media messages, advertisements, or products that are identified as conveying (or contradicting) unhealthy messages” (Thompson & Heinberg, 1999, p. 347).

However, to engage in media activism related to cultural ideals, it is important for an individual to understand the relationships among cultural ideals and sociocultural perspectives, based on research-oriented models (Levine et al., 1999). For instance, Austin’s Message-Interpretation Process Model helps enhance media literacy skills for children and adolescents towards the goal of preventing negative body image and eating disorders (Levine et al., 1999; for more explanation and empirical evidence see Irving, DuPen, & Berel, 1998). Therefore, the present study has the potential to inform individuals engaged in media activism related to cultural ideals such as body image concerns. For example, media activism campaigns could be developed to inform individuals (e.g., parents) that appearance-based comments (or teasing) directed at their children has several negative consequences, which include decrement in body esteem and body satisfaction and possible increment in materialistic behavior and fashion consumption.

Similarly, it is maintained that the findings from this study will be useful in body image education and prevention campaigns (Gudnadottir & Gardarsdottir, 2014; Levine et al., 1999; Thompson & Heinberg, 1999). For instance, prevention programs that incorporate a critical evaluation of media content must help individuals identify, analyze, and challenge the “body perfect ideal” prevalent in the media (Bordo, 1993; Levine & Smolak, 1998; Thompson & Heinberg, 1999). Similarly, the present study’s findings can be used to develop intervention studies to help individuals who are subjects of cultural ideals internalization, by increasing awareness of the relationship between these two cultural ideals (i.e., the perfect body and the material good life), and the potential negative outcomes resulting from internalizing the ideals.
Limitations and Future Directions

The present study has several limitations. First, the present sample consisted of adults in the U.S. only; thus, limiting the generalizability of the findings to other populations. In the future, studies should test the validity of the findings by using samples from other nations. Also, it is recommended that the proposed research model be tested on different age groups and more fully on a variety of U.S. ethnic groups. Furthermore, future studies could address the validity of the model in cross-cultural and cross-age contexts.

Second, the data were collected online (i.e., web-based). Although steps were taken to address the social desirability issue and order effects of measure presentation (e.g., multiple block items), nevertheless, complete elimination of social desirability responding could not be guaranteed. Furthermore, some researchers (e.g., Mick, 1996) maintain that constructs such as materialism, are more susceptible to social desirability bias. However, the materialism scale employed in the present study has been demonstrated to be somewhat immune to social desirability bias (Richins, 2004).

Third, the present study was quantitative in nature. Future studies should address the focal topic of the present research and aim for deeper insight into meanings of the measured concepts using qualitative as well as mixed methods. It has been maintained that both qualitative and qualitative research approaches have differing sets of advantages (e.g., Van Maanen, 1979). Also, Gudnadottir and Gardarsdottir (2014) recommended that longitudinal studies should be conducted to understand the developmental trajectory of the cultural ideal internalization process, such as what age does the internalization process begin and when should intervention be conducted.
Fourth, the present study examined the causal relationship between the individual level of fashion involvement (i.e., behavioral intention) and the two cultural ideals internalization. This study did not analyze actual fashion consumption behavior, which limits the findings for the present study. Manchiraju & Sadachar (2014), for example, have noted the gap between behavioral intention and actual behavior. However, other researchers (Verbeke & Vermier, 2006) have contended behavioral intention is strongly correlated with actual behavior. Nevertheless, future studies should address actual consumption behavior.

Finally, the present study’s model should be adapted to understand other consumption behavior, perhaps more closely related to the “dark side.” For example, the relationship between body satisfaction and compulsive buying could be explored. Or, the relationship between body satisfaction and hoarding behavior can be analyzed. In short, the present study findings suggest copious opportunities to explore various topics related to body satisfaction and consumption behavior.
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APPENDIX A. SURVEY INSTRUMENT (STAGE I)

SECTION 1: Socio-cultural influence

The following series of questions explores your thoughts about two ideals -- “the body perfect” and “the material good life.” Please indicate your degree of agreement or disagreement with the following statements by selecting the number that corresponds to your level of agreement.

Family members refer to parents, brothers, sisters, and relatives. Peers refer to close friends, classmates, and other social contacts. Media refers to television, magazines, the Internet, movies, billboards, and advertisements. Likert-type scale: 1 = “Strongly Disagree” to 7 = “Strongly Agree.”

1. I feel pressure from family members to look thinner/leaner.
2. I feel pressure from family members to improve my appearance.
3. Family members encourage me to decrease my level of body fat.
4. Family members encourage me to get in better shape.
5. My peers encourage me to get thinner/leaner.
6. I feel pressure from my peers to improve my appearance.
7. I feel pressure from my peers to look in better shape.
8. I get pressure from my peers to decrease my level of body fat.
9. I feel pressure from the media to look in better shape.
10. I feel pressure from the media to look thinner/leaner.
11. I feel pressure from the media to improve my appearance.
12. I feel pressure from the media to decrease my level of body fat.
SECTION 2: Materialism

Please indicate your degree of agreement or disagreement with the following statements. Likert-type scale: 1 = “Strongly Disagree” to 7 = “Strongly Agree.”

1. I admire people who own expensive homes, cars, and clothes.
2. I try to keep my life simple, as far as possessions are concerned.
3. My life would be better if I owned certain things I don’t have.
4. Buying things gives me a lot of pleasure.
5. I’d be happier if I could afford to buy more things.
6. I like to own things that impress people.
7. I like a lot of luxury in my life.
8. It sometimes bothers me quite a bit that I can’t afford to buy all the things I’d like.
9. The things I own say a lot about how well I’m doing in life.
SECTION 3: Appearance internalization

Please indicate your degree of agreement or disagreement with the following statements. Likert-type scale: 1 = “Strongly Disagree” to 7 = “Strongly Agree.”

1. It is important for me to look athletic.
2. I think a lot about looking muscular or thinner.
3. I want my body to look very chiseled or thin.
4. I want my body to look like it has little fat.
5. I think a lot about looking muscular or thin.
6. I spend a lot of time doing things to look more athletic.
7. I think a lot about looking athletic.
8. I want my body to look very lean.
9. I think a lot about having very little body fat.
10. I spend a lot of time doing things to look more muscular or thin.
11. Women/men who appear in TV shows and movies project the type of appearance that I see as my goal.
12. I believe that clothes look better on thin/lean models.
13. I do not wish to look like the models in magazines.
14. In our society, fat people are not regarded as unattractive.
15. Photographs of thin/lean women/men make me wish that I were thin/lean.
16. It’s important for people to work hard on their figures/physiques if they want to succeed in today’s culture.
17. Attractiveness is very important if you want to get ahead in our culture.
18. Most people do not believe that the thinner/leaner you are, the better you look.
19. In today’s society, it’s not important to always look attractive.
20. I wish I looked like a swimsuit model.
SECTION 4: Appearance comparison

Please indicate your degree of agreement or disagreement with the following statements. Likert-type scale: 1 = “Strongly Disagree” to 7 = “Strongly Agree.”

1. When I’m out in public, I compare my physical appearance to the appearance of others.
2. When I meet a new person (same sex), I compare my body size to his/her body size.
3. When I’m at work or school, I compare my body shape to the body shape of others.
4. When I’m out in public, I compare my body fat to the body fat of others.
5. When I’m shopping for clothes, I compare my weight to the weight of others.
6. When I’m at a party, I compare my body shape to the body shape of others.
7. When I’m with a group of friends, I compare my weight to the weight of others.
8. When I’m out in public, I compare my body size to the body size of others.
9. When I’m with a group of friends, I compare my body size to the body size of others.
10. When I’m eating in a restaurant, I compare my body fat to the body fat of others.
11. When I’m at the gym, I compare my physical appearance to the appearance of others.
SECTION 5: Fashion involvement

Fashion in appearance includes modifications of the body such as styled hair, tanned skin, pierced ears, scented breath, tattoos, garments, jewelry, accessories (e.g., handbags), footwear and other categories of items added to the body as supplements, as well as purposeful changes in body shape or size, such as muscle building and weight loss due to dieting. Some individuals are completely involved in fashion, attached to it, absorbed by it. For others fashion is simply not that involving. How involved are you in fashion? Please indicate your degree of agreement or disagreement with the following statements. Likert-type scale: 1 = “Strongly Disagree” to 7 = “Strongly Agree.”

1. Fashion means a lot to me.
2. Fashion is a significant part of my life.
3. I have a very strong commitment to fashion that would be difficult to break.
4. I consider fashion to be a central part of my life.
5. I think about fashion a lot.
6. For me personally fashion clothing is an important product.
7. I am very interested in fashion.
8. Fashion is important to me.
9. Fashion is an important part of my life.
10. I would say fashion is central to my identity as a person.
11. I would say that I am often pre-occupied with fashion.
12. I can really identify with fashion.
13. I am very much involved in/with fashion.
14. I find fashion clothing a very relevant product in my life.
15. I pay a lot of attention to fashion.
16. Making purchase decisions related to fashion is significant to me.
17. I think a lot about my choices when it comes to fashion.
18. I place great value in making the right decision when it comes to fashion.
19. Purchase decisions related to fashion are very important to me.
20. Making purchase decisions related to fashion requires a lot of thought.
21. I attach great importance to purchasing fashion products.
22. I like being involved in making purchases of fashion products.
23. The purchase of fashion products is important to me.
24. Purchasing fashion products is significant to me.
25. The feeling of self-fulfillment I get from wearing fashion products is significant.
26. I feel a sense of personal satisfaction when I wear fashion products.
27. Wearing fashionable products is one of the most satisfying and enjoyable things I do.
28. I like to think about wearing fashion products.
29. I often become preoccupied with wearing fashion products.
30. Wearing fashionable products is important to me.
31. Wearing fashionable products is important to me.
32. Wearing fashionable products means a lot to me.
33. Wearing fashionable products is a significant part of my life.
34. Ads about fashion are of no concern to me.
35. I pay a lot of attention to ads for fashion products.
36. Ads about fashion products are relevant to me.
37. Ads about fashion products are important to me.
38. I have little or no interest in ads for fashion products.
SECTION 6: Body satisfaction

Please indicate your degree of agreement or disagreement with the following statements. Likert-type scale: 1 = “Strongly Disagree” to 7 = “Strongly Agree.”

1. I like what I look like in pictures.
2. Other people consider me good looking.
3. I'm proud of my body.
4. I am preoccupied with trying to change my body weight.
5. I think my appearance would help me get a job.
6. I like what I see when I look in the mirror.
7. There are lots of things I'd change about my looks if I could.
8. I am satisfied with my weight.
9. I wish I looked better.
10. I really like what I weigh.
11. I wish I looked like someone else.
12. People my own age like my looks.
13. My looks upset me.
14. I'm as nice looking as most people.
15. I'm pretty happy about the way I look.
16. I feel I weigh the right amount for my height.
17. I feel ashamed of how I look.
18. Weighing myself depresses me.
19. My weight makes me unhappy.
20. My looks help me to get dates.
21. I worry about the way I look.
22. I think I have a good body.
23. I'm looking as nice as I'd like to.
SECTION 7: Demographic items

1. What is your gender? [Male/Female]
2. What is your age in years?
3. What is your ethnicity? [Euro-American (Caucasian); African-American; Hispanic; Asian or Pacific Islander; Native American; Other]
4. What is your education level? [High school diploma; Associate's degree; Bachelor's degree; Master's degree or professional degree (e.g., MD, PhD)]
5. What is your employment status? [Employed for wages; Self-employed; Out of work and looking for work; Out of work but not currently looking for work; A homemaker; A student; Military; Retired; Unable to work]
6. What is your family’s average household income? [Below $50,000; Between $50,000 and $100,000; Between $100,000 and $200,000; Above $200,000]
APPENDIX B. SURVEY INSTRUMENT (STAGE II)

SECTION 1: Socio-cultural influence

The following series of questions explores your thoughts about two ideals -- “the body perfect” and “the material good life.” Please indicate your degree of agreement or disagreement with the following statements by selecting the number that corresponds to your level of agreement. Family members refer to parents, brothers, sisters, and relatives. Peers refer to close friends, classmates, and other social contacts. Media refers to television, magazines, the Internet, movies, billboards, and advertisements. Likert-type scale: 1 = “Strongly Disagree” to 7 = “Strongly Agree.”

1. I feel pressure from family members to look thinner/leaner.
2. I feel pressure from family members to improve my appearance.
3. Family members encourage me to decrease my level of body fat.
4. Family members encourage me to get in better shape.
5. My peers encourage me to get thinner/leaner.
6. I feel pressure from my peers to improve my appearance.
7. I feel pressure from my peers to look in better shape.
8. I get pressure from my peers to decrease my level of body fat.
9. I feel pressure from the media to look in better shape.
10. I feel pressure from the media to look thinner/leaner.
11. I feel pressure from the media to improve my appearance.
12. I feel pressure from the media to decrease my level of body fat.
SECTION 2: Materialism

Please indicate your degree of agreement or disagreement with the following statements. Likert-type scale: 1 = “Strongly Disagree” to 7 = “Strongly Agree.”

1. I admire people who own expensive homes, cars, and clothes.
2. I try to keep my life simple, as far as possessions are concerned.
3. My life would be better if I owned certain things I don’t have.
4. Buying things gives me a lot of pleasure.
5. I’d be happier if I could afford to buy more things.
6. I like to own things that impress people.
7. I like a lot of luxury in my life.
8. It sometimes bothers me quite a bit that I can’t afford to buy all the things I’d like.
9. The things I own say a lot about how well I’m doing in life.
SECTION 3: Appearance internalization

Please indicate your degree of agreement or disagreement with the following statements. Likert-type scale: 1 = “Strongly Disagree” to 7 = “Strongly Agree.”

1. I think a lot about looking muscular or thin.
2. I want my body to look very chiseled or thin.
3. I think a lot about looking athletic.
4. I want my body to look very lean.
5. Photographs of thin/lean women/men make me wish that I were thin/lean.
SECTION 4: Appearance comparison

Please indicate your degree of agreement or disagreement with the following statements. Likert-type scale: 1 = “Strongly Disagree” to 7 = “Strongly Agree.”

1. When I’m at school, I compare my body shape to the body shape of others.
2. When I’m out in the public, I compare my body fat to the body fat of others.
3. When I’m with a group of friends, I compare my weight to the weight of others.
4. When I’m out in public, I compare my body size to the body size of others.
5. When I’m with a group of friends, I compare my body size to the body size of others.
SECTION 5: Body satisfaction

Please indicate your degree of agreement or disagreement with the following statements. Likert-type scale: 1 = “Strongly Disagree” to 7 = “Strongly Agree.”

1. I wish I looked better.
2. My looks upset me.
3. I’m pretty happy about the way I look.
4. I think I have a good body.
5. I’m looking as nice as I’d like to.
6. In a year, there are twelve months.
SECTION 6: Fashion involvement

Fashion in appearance includes modifications of the body such as styled hair, tanned skin, pierced ears, scented breath, tattoos, garments, jewelry, accessories (e.g., handbags), footwear and other categories of items added to the body as supplements, as well as purposeful changes in body shape or size, such as muscle building and weight loss due to dieting. Some individuals are completely involved in fashion, attached to it, absorbed by it. For others fashion is simply not that involving. How involved are you in fashion? Please indicate your degree of agreement or disagreement with the following statements. Likert-type scale: 1 = “Strongly Disagree” to 7 = “Strongly Agree.”

1. Fashion is a significant part of my life.
2. I have a very strong commitment to fashion that would be difficult to break.
3. For me personally fashion clothing is an important product.
4. Fashion is important to me.
5. I am very much involved in/with fashion.
6. I think a lot about my choices when it comes to fashion.
7. Purchase decisions related to fashion are very important to me.
8. I attach great importance to purchasing fashion products.
9. The purchase of fashion products is important to me.
10. Purchasing fashion products is significant to me.
11. The feeling of self-fulfillment I get from wearing fashion products is significant.
12. I like to think about wearing fashion products.
13. Wearing fashionable products is important to me.
14. Wearing fashionable products means a lot to me.
15. I pay a lot of attention to ads for fashion products.
16. Ads about fashion products are relevant to me.
17. Ads about fashion products are important to me.
18. I have little or no interest in ads for fashion products.
SECTION 7: Demographic items

1. What is your gender? [Male/Female]
2. What is your age in years?
3. What is your ethnicity? [Euro-American (Caucasian); African-American; Hispanic; Asian or Pacific Islander; Native American; Other]
4. What is your education level? [High school diploma; Associate's degree; Bachelor's degree; Master's degree or professional degree (e.g., MD, PhD)]
5. What is your employment status? [Employed for wages; Self-employed; Out of work and looking for work; Out of work but not currently looking for work; A homemaker; A student; Military; Retired; Unable to work]
6. What is your family’s average household income? [Below $50,000; Between $50,000 and $100,000; Between $100,000 and $200,000; Above $200,000]
APPENDIX C. IRB APPROVAL OF RESEARCH STUDY

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Institutional Review Board
Office for Responsible Research
Vice President for Research
1138 Pearson Hall
Ames, Iowa 50011-2207
515-294-4566
FAX 515-294-4267

Date: 6/18/2014
To: Srilankan Manchiraju
31 MacKay Hall

CC: Dr. Mary Lynn Damhorst
1068 LeBaron Hall

From: Office for Responsible Research

Title: Extension of the Tripartite Model of Body Influence: The Role of Materialism on Body Satisfaction and Fashion Involvement

IRB ID: 14-292

Study Review Date: 6/18/2014

The project referenced above has been declared exempt from the requirements of the human subject protections regulations as described in 45 CFR 46.101(b) because it meets the following federal requirements for exemption:

- (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey or interview procedures with adults or observation of public behavior where
  ○ Information obtained is recorded in such a manner that human subjects cannot be identified directly or through identifiers linked to the subjects; or
  ○ Any disclosure of the human subjects' responses outside the research could not reasonably place the subject at risk of criminal or civil liability or be damaging to their financial standing, employability, or reputation.

The determination of exemption means that:

- You do not need to submit an application for annual continuing review.

- You must carry out the research as described in the IRB application. Review by IRB staff is required prior to implementing modifications that may change the exempt status of the research. In general, review is required for any modifications to the research procedures (e.g., method of data collection, nature or scope of information to be collected, changes in confidentiality measures, etc.), modifications that result in the inclusion of participants from vulnerable populations, and/or any change that may increase the risk or discomfort to participants. Changes to key personnel must also be approved. The purpose of review is to determine if the project still meets the federal criteria for exemption.

Non-exempt research is subject to many regulatory requirements that must be addressed prior to implementation of the study. Conducting non-exempt research without IRB review and approval may constitute non-compliance with federal regulations and/or academic misconduct according to ISU policy.

Detailed information about requirements for submission of modifications can be found on the Exempt Study Modification Form. A Personnel Change Form may be submitted when the only modification involves changes in study staff. If it is determined that exemption is no longer warranted, then an Application for Approval of Research Involving Humans Form will need to be submitted and approved before proceeding with data collection.

Please note that you must submit all research involving human participants for review. Only the IRB or designees may make the determination of exemption, even if you conduct a study in the future that is exactly like this study.

Please be aware that approval from other entities may also be needed. For example, access to data from private records (e.g., student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. An IRB determination of exemption in no way implies or guarantees that