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# Differences in Body Satisfaction Between Black and White Heterosexual College-Aged Men

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Walden University
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Abstract

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MEd, University of New Orleans, 2004

Dissertation Submitted in Partial Fulfillment

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Abstract

Although there is an increasing amount of research concerning body satisfaction among heterosexual White men, few of these studies have adequately represented heterosexual Black men. This was a quantitative survey study aimed to illuminate gaps in the literature regarding Black men's body satisfaction experiences. The study used surveys and tested research questions to determine whether college-aged heterosexual Black ($n$ = 220, 55%) and White ($n$ = 180, 45%) men differed in their body satisfaction experiences and whether race significantly moderated the relation between sociocultural influences and body satisfaction in the two groups. This study was based on the social comparison theory, and examined sociocultural influences (i.e., media images, parents, peers, internalization of cultural appearance standards, and drives for muscularity) known to be associated with body satisfaction. Results from $t$ test analyses indicated that Black men were significantly more satisfied with their appearance and weight, were significantly more confident that other people liked their appearance, and reported less social pressures to have an attractive body in comparison to their White peers. A series of moderated regression analyses failed to indicate that race moderated the relation between the sociocultural influences and body satisfaction. Seventy-five percent of both groups were dissatisfied with their bodies and desired to be more muscular. Social change implications include alerting clinicians that Black men, like White men, should be screened for problems with body satisfaction: Results may stimulate research to determine why Black men have greater overall body satisfaction than White men, and lead to culturally-specific guidelines for identifying and treating body dissatisfaction.

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# Dedication

This dissertation is dedicated to my mother, Ms. Ida Lee Young Renfro (RIP). It was always one of your dreams to make a better life for your family. You sacrificed for me and my siblings by putting our needs before yours. We are your legacy, and through us, you continue to live on after death. Rest in peace, my sweet angel. I know one day we will be together again.

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# Chapter 1: Introduction to the Study

## Introduction

Pubertal changes in boys include increased testosterone levels, growth of body and facial hair, larger muscle growth, and deepening voices. These noticeable physical changes may cause boys to compare their bodies to other boys' bodies (Maxwell & Cole, 2012). Comparing oneself to others was the central element in Festinger's influential social comparison theory (1954). Festinger hypothesized that people compared themselves to others in order to evaluate their own appearances. However, these evaluations tended to be negative, subjective, internalized, and reflective of social values for ideal bodies (Ferguson, 2013; Menzel et al., 2011; Stice & Shaw, 2002). Examples of ideal body characteristics for men are broad shoulders, small waists, and muscular chests and legs (Schooler & Ward, 2006). People see these muscular ideals every day, which could affect their perceptions of what the ideal male body is and could influence body satisfaction (Lawler & Nixon, 2011; Maxwell & Cole, 2012; Schuster & Negy, 2011).

Just as making comparisons with others may encourage men and boys to internalize ideals about their bodies, media (e.g., television and magazines), parents, and peers may also influence how men and boys view their own bodies (Altabe, &Tantleff-Dunn, 1999; Bakhshi, 2011; Belden, 2011; Guan, Lee, & Cole, 2012; Standford & McCabe, 2002; Thompson, Heinberg). For example, toned and muscular body types seen on television and in magazines may set internalized ideal body standards (Galli & Reel, 2009). These internalized body standards may lead to body satisfaction issues when men

are not able to achieve these body standards (Farquhar & Wasylkiw, 2007; Nikkelen, Anschutz, Ha, & Engels, 2012; Stout & Frame, 2004).

Issues related to body satisfaction were once thought to be primarily or exclusively found among White women (Overstreet, Quinn, & Agocha, 2010). This incorrect perspective led researchers to focus their efforts on studies of White women or girls, and there was little interest in studying body satisfaction in men (Hemal &Thompson, 2006; Stormer & Thompson, 1996). Researchers have examined differences in body satisfaction between Black and White women. For instance, Grabe and Hyde's (2006) meta-analysis found that White women had less body satisfaction than Black women. Similarly, Roberts, Cash, Feingold, and Johnson's (2006) meta-analysis found evidence that Black women were more likely to report body satisfaction than White women. In addition, Streigel-Moore et al. (1995) argued that Black and White women face different social pressures and cultural expectations associated with ideal body types. This may be because the most common body ideals (e.g., slim/thin bodies) reflect standards that have been created by the more dominant American (e.g., White) culture. For example, researchers have shown that female media images usually depict slim White women and girls (Anschutz, Van Strien, & Engels, 2011). These media images may influence White women to desire thinner bodies. In contrast, Guan, Lee, and Cole (2012) found that Black cultural standards include thicker body ideals for women. These differences in body ideals have indicated that understanding cultural influences is an important aspect of the effort to understand the development of body satisfaction and dissatisfaction.

Although studies of men's body satisfaction have become more common in the last decade, few of these studies have included Black men, and none of the available studies have compared Black and White heterosexual men (Michaels, Parent, & Moradi, 2012). Given what is known about differences in body satisfaction between Black and White women, I examined differences in body satisfaction and ideal body types between Black and White heterosexual college men. In addition, I examined influences from media, family, and peers (tripartite influence model), internalization of cultural appearance standards, and drives for muscularity to determine whether race moderated the effects of the tripartite factors. Examining these variables allowed me to ascertain whether they influenced body satisfaction among Black men in a manner similar to other groups. This study could contribute to social change by providing new information regarding differences in body satisfaction between Black and White heterosexual college-aged men. The results from this study could be used to assist clinicians in developing culture- and gender-specific interventions for heterosexual men and boys who experience problems with body satisfaction.

In the remainder of this chapter, I summarize the literature on body satisfaction, identify gaps in that literature, describe the intentions of the study, and identify the variables that were studied. In addition, I address the research questions and hypotheses, theoretical framework, assumptions/limitations, and rationale for this study. I conclude this chapter by identifying the contributions and significance of the study.

## Background of the Problem

Researchers once thought concerns with body image were relatively rare among heterosexual men (Jung, Forbes, & Chan, 2010; Myers & Crowther, 2009). This belief may have been the result of the assumption that heterosexual men are more satisfied with their bodies than women (Jung, Forbes, & Chan, 2010; Myers & Crowther, 2009). Moreover, this assumption led researchers to believe that risk factors such as disordered eating behaviors (e.g., anorexia and bulimia) and low self-esteem associated with body satisfaction were only issues for women and girls (Rayner, Schniering, Rapee, Taylor, & Hutchinson, 2013; Thompson et al., 1999). Consequently, treatments and interventions to address body satisfaction issues have been based almost completely on research with women and girls (Berner, Shaw, Witt, & Lowe, 2013; Stice, Rohde, Shaw, & Marti, 2013). The results of this research could be used to expand current body satisfaction research by assisting clinicians with creating specific research-based treatments and interventions for Black and White heterosexual college men's issues with body satisfaction.

Men are expected to have toned, muscular, athletic, and powerful bodies because cultural ideal body standards for heterosexual men are set by professional athletes (Galli & Reel, 2009; Hebert et al., 1997). Given this expectation, researchers have found that heterosexual men are likely to have body image issues and low self-esteem if they perceive their bodies as lacking in athleticism and muscularity (Cafri & Thompson, 2004; Grossbard, Lee, Neighbors, & Larimer, 2009). Moreover, researchers have found that heterosexual men are inundated with information on beautification products and

programs that promote muscular bodies similar to the bodies of professional athletes (Galli & Reel, 2009; Schuster, Negy, & Tantleff-Dunn, 2011; Schwartz, Grammas, Sutherland, Siffert, & Bush-King, 2010). Drummond (2011) suggested that perceived social values regarding ideal body types may lead heterosexual men to internalize these standards and then use these standards to evaluate their own bodies. Thompson et al. (1999) referred to *internalization* as a process people use to psychologically incorporate standards from other people into their own personalities. I examined the internalization of cultural appearance standards associated with body satisfaction among Black and White heterosexual college-age men to determine whether differences existed between these two groups of men.

Researchers have identified a wide variety of variables associated with body image issues and body satisfaction among men. For instance, Pope, Phillips, and Olivardia (2000) examined three different surveys in three different decades and found an increase (15% in 1972 to 34% in 1985 to 43% in 1997) in body dissatisfaction rates for men. Pope and his associates examined men and boys' preoccupation with body image, media influences, internalization associated with body satisfaction, and behaviors men and boys exhibited to achieve ideal bodies. Thompson and Cafri (2007) found that pressures from society influenced men's desires for muscular bodies. Thompson and Cafri (2007) labeled this the *muscular ideal*. Steinfeldt, Gilcrist, Halterman, Gomory, and Steinfeldt (2011) found that men's body satisfaction was influenced by their need to identify and conform to perceived social norms. However, the aforementioned studies did not address possible differences in body satisfaction between Black and White

heterosexual men. I examined perceived social pressures associated with body satisfaction and ideal body types to determine whether differences existed between Black and White heterosexual college-aged men.

Researchers have found that heterosexual men's body image concerns have been increasing (McFarland & Petrie, 2012; Mulgrew, Johnson, Lane, & Katsikitis, 2013). Examples of these body concerns are feelings of shame, self-doubt, and insecurities associated with comparisons made between men's actual body types and men's internalized body ideals (Knauss Paxton & Alsker, 2008; Michaels, Parent, & Moradi, 2012). However, similar to body satisfaction research with women, much of heterosexual men's body satisfaction research has been conducted with predominantly White participants. For instance, McFarland and Petrie's (2012) investigation of men's satisfaction with specific body parts included 120 White male college students and only 24 Black male college students from a large university in the southwestern United States. An investigation of men's body satisfaction and internalized appearance standards conducted by Schuster et al. (2013) included 454 participants (293 White male students and only 45 or 9.9% Black male students) at a large university in the southeastern section of the United States. Michaels, Parent, and Moradi's (2011) investigation of the exposure of muscular images and body satisfaction included 140 male undergraduate college student participants (58% White participants and only 9% Black). Karazsia and Crowther's (2010) investigation of media, family, and peer influences; social comparisons; and psychological links to men's engagement in risky body change

behaviors included 210 undergraduate male participants (89.1% White men and only 7.1% Black participants) from a large public university in the Midwestern United States.

Although Black men have been included in body satisfaction research, small sample sizes indicate that Black men are underrepresented in this research. Moreover, I did not find any research that focused on differences in body satisfaction between Black and White heterosexual men. However, differences in body satisfaction between Black and White adolescent boys have been studied. Jung and Forbes (2010) examined differences associated with body satisfaction in a study that included 82 Black adolescent boys and 223 White adolescent boys. Although there were no differences on the figure ratings between the Black and White boys, Jung and Forbes found that Black boys had greater body satisfaction than White boys on the body questionnaire measures. +

A review of the literature indicated that Black men have been underrepresented in body satisfaction research. Consequently, there is little data as to Black men's levels of body satisfaction, as well as the extent to which Black men endorse the muscular male ideals portrayed in the media and experience social pressures to achieve these ideals. Current research indicates that social comparison and social standards related to body types may influence internalized body perceptions, attitudes, behaviors related to appearance, and assessments of self-worth (Bessenoff & Snow, 2006; Karazsia, van Dulmen, Wong, & Crowther , 2013; Vartanian & Dey, 2013). In contrast to the extensive research on media, family, and peer influences in body satisfaction among girls and women, these influences have only been studied among White men in the last few years, while virtually no work has addressed these influences among heterosexual Black men.

As a consequence, it is unknown how the experiences of heterosexual Black men and heterosexual White men differ and how these differences, if present, encourage or prevent the development of body dissatisfaction (Grossbard, Lee, Neighbors, & Larimer, 2009).

## Problems With Research and Treatments Addressing Black Men's Body Image Issues

The previous section (s) provided evidence that Black men have been underrepresented in research concerning body satisfaction; media, family, and peer influences; internalization of cultural appearance standards; and drives for muscularity. For the most part, this research has not adhered to guidelines for including minorities, specifically Black men, when conducting research. According to the Council of National Psychological Associations for the Advancement of Ethnic Minority Interest (CNPAAEMI, 2000), researchers have ethnical obligations to (a) study ethnic differences, (b) do research in ways that are sensitive to and respectful toward ethnic differences, and (c) use research to design ethnically sensitive and appropriate interventions for social and personal problems.

The American Psychological Association's Presidential Task Force defined *evidence-based practice* as an integration of both research and expertise in treatments with respect to a person's characteristics, preferences, and culture (Anderson, 2006). However, research has shown that evidence-based best-practice treatments have failed to address specific cultural needs (Association of Black Psychologists, 2011). Moreover, researchers often assume that treatments will be effective with minority groups rather

than using valid techniques to assess their effectiveness (National Institution on Health, 2001). Evidence-based treatment for White men may not be effective for Black men (Burlew et al., 2011). Therefore, it is important to examine the previously discussed issues in order to create specific treatments and interventions for Black men.

## Statement of the Problem

The literature has shown that women and girls have been the primary focus of body satisfaction research (Frederick, Forbes, Grigorian, & Jarcho, 2007; Grossbard, Lee, Neighbors, & Larimer, 2009; Schwartz, Grammas, Sutherland, Siffert, & Bush-King, 2010) and media influence research (Bell & Dittmar, 2011; Ferguson, 2013; Ferguson, Winegard, & Winegard, 2011). Moreover, the same pronounced bias appears in research on family and peer influences (Johnson & Stapel, 2010; Rayner et al., 2013). Two important factors may contribute to women and girls being the primary focus of body satisfaction research. The first factor is the social perception that women have more body concerns than men, and the second factor is that women are expected to have and maintain ideal bodies (Rothblum, 1990). In addition, research on the impact of internalization of cultural appearance standards began with the study of women's experiences, and this emphasis remains in the literature (Bell & Dittmar, 2011; Karazsia, van Dulmen, Wong, & Crowther, 2013; Menzel et al., 2011; Vartanian & Dey, 2013).

Pope, Phillips, and Olivardia's (2000) influential book, *The Adonis Complex*, provided compelling evidence of body image concerns in men, alerting society to the importance of studying the nature, origin, and effects of body dissatisfaction in men and boys. Examining men's body dissatisfaction in 1972, 1985, and 1997, the authors found

that body dissatisfaction increased from 15% in 1972 to 34% in 1985 to 43% in 1997. They also found that men and boys' dissatisfaction with their overall appearances increased with age (19% for ages 13-19, 48% for ages 50-59). The researchers also examined the behaviors men and boys exhibited to achieve ideal bodies, including smoking, vomiting, and compulsive exercise.

Important findings from the Pope et al. (2000) study indicated that men are increasingly challenged to meet sociocultural demands to have ideal bodies (Murray & Lewis, 2014). One of the more recent developments in the study of men's body image has been an emphasis on the role of the desire for muscularity. Although muscularity concerns are now routinely investigated among men and less frequently among boys, very few of these studies have included Black men and boys. Even when Black men and boys have been included, their numbers have been too small to allow for a comparative analysis based on race. For instance, Black men made up 5.2% of the 368 college men in Bergeron and Tylka's (2007) study of muscularity components (e.g., attitudes, behavior, and body image).

Similarly, Parent and Moradi's (2011) muscularity study included 270 college men. White men made up 59% of the study's participants, and Black men accounted for only 3% of the study's participants. Similarly, 293 (64.7%) White men and only 21 (4.8%) Black men participated in a study conducted by Schuster et al. (2013) concerning college men's desires to be muscular, among a total of 454 college men. Consequently, almost nothing has been known about muscularity concerns among Black men and boys. Among other things, this gap in the literature has made it impossible to design

appropriately focused prevention or intervention programs for heterosexual Black men's concerns with muscularity.

Although White men and, to a lesser extent, White boys have been increasingly included in research on body satisfaction, no studies have specifically examined differences in body satisfaction issues between Black and White heterosexual men (Hesse-Biber, Howling, Levy, & Lovejoy, 2004). It has been unknown if there are differences in how Black and White heterosexual men experience body dissatisfaction. Determining differences was one of the central problems in this research. Another central problem in this research was determining whether Black men have body satisfaction issues similar to Black and White women and White men. Examining these problems was seen as one of the first steps in mitigating and/or reducing risk factors associated with body image issues among Black and White heterosexual men.

## Purpose of Study

The overarching purpose of this study was to quantitatively examine differences in body satisfaction between Black and White heterosexual college-aged men. It has been demonstrated that Black women have greater body satisfaction than White women (Grabe & Hyde, 2006). However, the issue of body satisfaction being greater among Black women was not relevant to my study. What was relevant to my study was that differences in body satisfaction did exist between Black and White women. For this reason, a purpose of this study was to determine whether these differences also occurred between Black and White heterosexual men and to determine the nature and direction of these differences.

In addition, it has been demonstrated that media, family, and peer influences and internalization of cultural appearance standards influence and predict body satisfaction in women (Drewes, 2005; Menzel et al., 2011; Thompson et al., 1999). Another purpose of this study was to ascertain whether differences in these influences and predictors were also present in Black and White heterosexual men. I sought to determine whether race moderated the relations between predictors and body satisfaction among Black and White heterosexual college-aged men.

## Research Questions and Hypotheses

### Research Question 1

Are there differences in selected aspects of body satisfaction between Black and White heterosexual college-aged men as measured by the following scales: Appearance = Body Esteem Scale for Adolescents and Adults Appearance Satisfaction subscale (Mendelson, White, & Mendelson, 1997); Weight = Body Esteem Scale for Adolescents and Adults Weight Satisfaction subscale (Mendelson et al., 1997); Attribution = Body Esteem Scale for Adolescents and Adults Attribution subscale (Mendelson et al., 1997); WMFDS = Ideal—Actual discrepancy score on the Winitch Men's Figure Drawing Scale (Lynch & Zellner, 1999; Winitch, 1993)?

$H1_0$: There are no differences between Black and White heterosexual college-aged men in appearance satisfaction as measured by the Appearance subscale.

$H1_A$: There are differences between Black and White heterosexual college-aged men in appearance satisfaction as measured by the Appearance subscale.

$H2_0$: There are no differences between Black and White heterosexual college-aged men in weight satisfaction as measured by the Weight subscale.

$H2_A$: There are differences between Black and White heterosexual college-aged men in weight satisfaction as measured by the Weight subscale.

$H3_0$: There are no differences between Black and White heterosexual college-aged men in attribution as measured by the Attribution subscale.

$H3_A$: There are differences between Black and White heterosexual college-aged men in attribution as measured by the Attribution subscale.

$H4_0$: There are no differences between Black and White heterosexual college-aged men in their levels of muscular satisfaction as measured by the WMFDS.

$H4_A$: There are differences between Black and White heterosexual college-aged men in their levels of muscular satisfaction as measured by the WMFDS.

**Research Question 2**

Are there significant differences between Black and White heterosexual college-aged men on the following predictors measures: Internalization = Internalization—General subscale of the Sociocultural Attitudes Toward Appearance Scale, third edition (Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004); PSPS = Perceived Social Pressures Scale (Stice & Bearman, 2001; modified Forbes & Jung, 2014); DMS-Attitude = Drive for Muscularity Attitude subscale (McCreary, Sasse, Saucier, & Dorsch, 2004); DMS-Behavior = Drive for Muscularity Behavior subscale (McCreary et al., 2004)?

$H5_{0:}$ There are no significant differences between Black and White heterosexual college-aged men in internalization of cultural appearance standards as measured by the Internalization scale.

$H5_{A}$: There are significant differences between Black and White heterosexual college-aged men in internalization of cultural appearance standards as measured by the Internalization subscale.

$H6_{0}$: There are no significant differences between Black and White heterosexual college-aged men in perceived social pressures as measured by the PSPS.

$H6_{A}$: There are significant differences between Black and White heterosexual college-aged men in perceived social pressures as measured by the PSPS.

$H7_{0}$: There are no significant differences between Black and White heterosexual college-aged men in drives from muscularity as measured by the DMS-Behavior subscale.

$H7_{A}$: There are significant differences between Black and White heterosexual college-aged men in drives for muscularity as measured by the DMS-Behavior subscale.

$H8_{0}$: There are no significant differences between Black and White heterosexual college-aged men in drives from muscularity as measured by the DMS-Attitude subscale.

$H8_{A}$: There are significant differences between Black and White heterosexual college-aged men in drives for muscularity as measured by the DMS-Attitude subscale.

**Research Question 3**

Does race moderate the relations between each of the predictor measures and the measures of body satisfaction for Black and White heterosexual college-aged men?

$H9_0$: Race does not moderate the relations between internalization and body satisfaction among Black and White heterosexual college-aged men.

$H9_A$: Race does moderate the relations between internalization and body satisfaction among Black and White heterosexual college-aged men.

$H10_0$: Race does not moderate the relations between perceived social pressures and body satisfaction among Black and White heterosexual college-aged men.

$H10_A$: Race does moderate the relations between perceived social pressures and body satisfaction among Black and White heterosexual college-aged men.

$H11_0$: Race does not moderate the relations between DMS-behavior satisfaction and body satisfaction among Black and White heterosexual college-aged men.

$H11_A$: Race does moderate the relationship between DMS-behavior satisfaction and body satisfaction among Black and White heterosexual college-aged men.

$H12_0$: Race does not moderate the relations between DMS-attitude satisfaction and body satisfaction among Black and White heterosexual college-aged men.

$H12_A$: Race does moderate the relations between DMS-attitude satisfaction and body satisfaction among Black and White heterosexual college-aged men.

## Theoretical and Conceptual Framework

Three closely related theoretical frameworks guided this research. These theoretical frameworks were first used to understand body satisfaction among White women and girls (Jung & Forbes, 2010). The first of these frameworks was the *tripartite influence model*. This model identifies social influences from media, family, and peers as the primary sources of body satisfaction (Thompson, et al., 1999). The second of these

frameworks was *sociocultural theory*. This theory emphasizes the role of unrealistic body ideals, as portrayed in the media, in body satisfaction (Menzel et al., 2011). These unrealistic ideals impact body satisfaction when they are internalized. *Internalization* occurs when people take unrealistic external values and incorporate them into the standards used to evaluate their own bodies (Thompson et al., 1999). The last of these frameworks was *social comparison theory*. Social comparison theory was initially proposed by social psychologist Festinger in 1954, and has been expanded over the years (e.g., Jones, 2004). Festinger (1954) hypothesized that comparisons made with others help people internally evaluate their own thoughts, abilities, behaviors, and perceptions. These internalized evaluations are a way for people to measure their own attractiveness and acquire information about themselves (Myers & Crowther, 2009). Moreover, social comparison theory has proven to be particularly useful in understanding how media, family, and peers influence the internalization of unrealistic cultural appearance standards and its consequent influence on body satisfaction (Farquhar & Wasylkiw, 2007; Warren & Rios, 2012).

## Measures Guided by Theoretical Framework

I used the theories mentioned in the previous section, along with body satisfaction measures (Appearance, Weight, Attribution, and WMFDS) and predictor measures (e.g., Internalization—General subscale, PSPS, and DMS), to assess differences in body satisfaction, media, family, and peer influences; internalization of cultural appearance standards; and drives for muscularity between Black and White heterosexual college-aged men. The BESAA, designed for use with both men and women, was used to

measure body satisfaction. The BESAA consisted of three factor analytically derived subscales of different aspects of body attitudes (Mendelson, White, & Mendelson, 1997). The subscales used were BE-Appearance, which measured generalized attitudes about appearances; BE-Weight, which measured satisfaction regarding body weight; and BE-Attribution, which measured the participant's perception of how other people perceived his body.

The PSPS is a measure of the influences (media, parents, and peers) specifically addressed by the tripartite influence model (Stice, 2001; Stice et al., 1996). The Internalization—General subscale measures the extent to which cultural appearance standards are accepted as appropriate standards by which to evaluate one's own appearance. Although the concept of a drive for thinness was developed for women and has questionable applicability for men, men have a comparable drive, the drive for muscularity (Cafri & Thompson, 2004). I measured the latter with the DMS-Behavior and DMS-Attitude, and I measured levels of muscular satisfaction with the WMFDS.

I provide detailed explanations for both social comparison theory and the tripartite influence model in Chapter 2. I also provide detailed descriptions of all measures in Chapter 3.

## Nature of Study

This was a quantitative study with a survey design. Given the study's estimated sample size and the study length, using the Internet to conduct this study was appropriate. The Internet allowed me to easily and accessibly recruit participants and allow participants to conveniently complete all instruments online. Descriptive statistics were

used to summarize the collected data. Race was a grouping (Black and White) variable. Individual *t* tests for independent groups with sequential Bonferroni corrections were used to determine if there were differences between Black and White heterosexual college men on each of the measures. The overall alpha was set at .05. There were two measures of body satisfaction/dissatisfaction [the Body-Esteem Scale for Adolescents and Adults (BESAA: Mendelson, White, & Mendelson, 1997) and the Winitch Figure Drawing Scale (WMFDS: Lynch & Zellner, 1999; Winitch, 1993)]. There were three predictor measures: Perceived Sociocultural Pressure Scale (Stice & Bearman, 2001; modified Forbes & Jung, 2014), Internalization—General subscale of the Sociocultural Attitudes Towards Appearance Questionnaire-3 (SATAQ-3; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004), and the Drive for Muscularity Scale (DMS; McCreary, Sasse, Saucier, & Dorsch, 2004).

Participants were a convenience sample of 400 Black and White heterosexual male students between the ages of 18 and 29. I used this age group because body image issues seemed more prevalent among its members. Murray and Lewis (2014) examined the moderating role of age in the development of body satisfaction among 146 male participants between the ages of 17 and 71 and found that the younger adult group (ages 17-29, $n = 81$) reported lower levels of muscle and body satisfaction than the older adult groups. Unfortunately, Murray and Lewis (2014) did not provide racial data for the participants in their study.

Participants were recruited from a local community college in a large Southern city. The community college had a diverse enrollment of 18,000 students. This

enrollment included 4,204 men (*n* = 2,202 Black, *n* = 2,002 White) (Louisiana Board of Regents, 2014). Following IRB approvals from Walden University and the local community college, participants were recruited by e-mail. The e-mail contained a solicitation message describing the study and consent to participate in the study. In addition, the email contained a link that directed participants to the study on Survey Monkey. Current students registered in any of my courses did not receive the solicitation email. However, past students whose registration records indicated that they were registered for a class taught by me did receive solicitation emails. I provide detailed descriptions of the research design, measures, and rationale for the study in Chapter 3.

## Definition of Terms

Definitions and explanations of terms are based on how the terms are used in this study.

*Body satisfaction* can be defined as a person's favorable evaluation of his or her body (Stice & Shaw, 2002).

*Drive for muscularity* refers to a strong emotional state and sometimes almost motivational obsession to develop additional muscle mass (Bergeron &Tylka, 2007).

*Internalization* is a psychological process in which people take external values and incorporate them into their personalities (Thompson et al., 1999).

*Race* is a historical set of ideas and practices that categorizes ethnic groups based on similar physical and behavioral characteristics (Markus, 2008).

*Tripartite influence model* refers to a sophisticated and nuanced theory that examines media, family, and peer influences on attitudes and behaviors (Thompson et al., 1999).

## Assumptions and Limitations

It was assumed that participants voluntarily and truthfully completed all questionnaire and survey material to the best of their knowledge. However, there was no way to determine if participants were being honest with their responses. Therefore, it was assumed that self-reporting was a limitation. It was assumed that all measures used in the study were appropriate to measure the identified variables. It was assumed that all measures were culturally sensitive and were appropriate to use with the population in the study. It was also assumed that completion of the measures on the Internet would not affect their validity. It was assumed that this study would not expose the participants to harm. It was assumed that my position as a psychology instructor would not influence the participants' decision to participate or influence their responses.

This research had a number of limitations. This research used participants from one higher education institution in one Southern city. The participants were limited to Black and White men, 18 to 29 years of age, with Internet access. However, the results should be generalized to other samples with appropriate caution. This research was limited to only examining potential sources associated with body satisfaction, and not potential outcomes associated with body satisfaction.

## Scope and Delimitations

This study focused on differences in body satisfaction between Black and White heterosexual college-aged men. The study examined whether or not scores on measures of body satisfaction and dissatisfaction were predicted by race, internalization of cultural appearance standards, perceived social pressure, and drives for muscularity scores among Black and White heterosexual college-aged men. The results from the study can be generalized to other populations, particularly other racial or ethnic groups, with appropriate caution. This study was limited to Black and White heterosexual urban college-aged heterosexual men between the ages of 18 and 29 from one geographical (e.g., Southern) location. The study was limited to participants who had access to the Internet. The study was limited to examining body satisfaction, internalization, perceived social pressures, and drive for muscularity among Black and White heterosexual college men.

## Significance

This study examined differences in body satisfaction between Black and White heterosexual college-aged men using the tripartite influence model. In addition, this study examined internalization of cultural appearance standards and drives for muscularity among Black and White heterosexual college-aged men. This was the first study that compared Black and White heterosexual men's levels of body satisfaction and determined whether race moderated the relations between measures of body satisfaction and three predictor variables (internalization of cultural appearance ideals; social press from media, peers, and family; and drive for muscularity). This study allowed me to

determine similarities and differences in body satisfaction between Black and White college-aged men. It also allowed me to determine whether these differences paralleled known differences between Black and White women. In additional, examining these variables allowed me to determine whether Black men had body satisfaction experiences similar to those of Black and White women and White men. This study could allow researchers to gain knowledge of differences in body satisfaction between Black and White heterosexual college men. The results from this study could help therapists and treatment providers create better and specific treatment plans for men and boys experiencing issues with body satisfaction. In addition, results from this study could specifically assist healthcare providers in better treating Black men who experience body image issues. This study could also encourage additional research examining body satisfaction; media, family, and peer influences; internalization; and/or drives for muscularity in Black men and boys.

## Summary

Researchers have found that media, family, and peer influences; internalization of cultural appearance standards; and drives for muscularity influence body satisfaction in both sexes (Dohnt & Tiggerman, 2006; Farquhar & Wasylkiw, 2007; Ferguson, 2013; Lopez-Guimera, Levine, Sanchez-Carracedo, & Fauguet, 2010; Maxwell & Cole, 2012; McFarland & Petrie, 2012; Schuster & Negy, 2011). However, most of the research on body satisfaction has used predominantly or exclusively White samples (Cohen, 2006; Grossbard, Lee, Neighbors, & Larimer, 2009; Schwartz, Grammas, Sutherland, Siffert, & Bush-King, 2010). Although heterosexual men have increasingly been included in

studies of body satisfaction, a review of the literature showed that very little of this research has included meaningful numbers of Black men, and none of it has sought to identify similarities and differences in how Black and White heterosexual men experience and value their bodies.

I begin Chapter 2 by restating the problem and purpose of the study. I also present a review of the current literature that established the relevance of the research problem. In addition, I provide and describe literature search strategies. I conclude by presenting theoretical descriptions reviewed and synthesized studies related to my research questions.

I include detailed descriptions of methods used to study the research questions in Chapter 3. In Chapter 3, I also describe the relationships among media, family, and peer influences; internalization of cultural appearance standards; drives for muscularity; and body satisfaction. I also give descriptions of research design, measures, participants, ethical considerations, informed consent, measures used to ensure confidentiality, and research procedures. Additionally, I describe data analysis, research questions, and hypotheses.

In Chapter 4, I provide information on how I collected data. In addition, data analysis and descriptions of data are provided in this chapter. In Chapter 5, I provide comprehensive interpretations of study results, limitations of the study, recommendations for future research, and implications for social change based on findings, and I conclude the research by providing an overview of the findings.

# Chapter 2: Literature Review

## Introduction

There are gaps in the literature regarding body satisfaction among heterosexual men. For instance, there are limited data showing differences in body satisfaction between Black and White men (Hesse-Biber, Howling, Levy, & Lovejoy, 2004). There is also limited research examining media, family, and peer influences on body satisfaction among Black and White men (Hesse-Biber et al., 2004). Influences from media, family, and peers encourage people to compare themselves to others (Drewes, 2005; Thompson et al., 1999). Festinger (1954) introduced social comparison theory to explain the role and importance of comparing oneself to others. According to this theory, comparing oneself to others is a natural tendency that allows people to internalize the ideal physical characteristics they should possess (Festinger, 1954).

I used four predictor variables (perceived social pressures, internalization of cultural appearance ideals, drive for muscularity—behavior, and drive for muscularity—attitude) to demonstrate the need to examine differences in body satisfaction between Black and White heterosexual men. The purpose of this literature review is to review data on body satisfaction among the target groups; examine past research associated with media, family, and peer influences on body satisfaction; and examine differences in body satisfaction. I further examine data to determine whether media, family, and peer influences are predictors of body satisfaction between the target groups, and to identify gaps in the knowledge associated with differences in body satisfaction and in predictor variables between those groups.

In addition, I expanded the tripartite influence model by including race as a moderator. This expanded model was used to examine the role race plays in moderating the relations between Black and White heterosexual men's body satisfaction and three predictor variables (internalization of cultural appearance ideals; social pressure from media, peers, and family; and drive for muscularity). In this review, I show gaps in the literature related to differences between Black and White heterosexual men's body image. Addressing gaps could allow researchers to gain knowledge of differences in body satisfaction between Black and White heterosexual men and to assist treatment providers with creating race- and gender-specific interventions to reduce body image issues.

The remainder of Chapter 2 includes a review of literature on body satisfaction; research associated with media, family, and peer influences; internalization of cultural appearance standards; social comparison theory; the drive for muscularity; and the measures I used in the study. In addition, I compared men's body satisfaction research with women's body satisfaction research. I included research on women's body satisfaction in this review for the following reasons: (a) most of the research on body satisfaction has been done with White women, (b) none of the available data on racial differences in body satisfaction have included meaningful numbers of Black men, and (c) theoretical models of men's body satisfaction have been based on research with women. Consequently, research with women was reviewed to provide relevant context for my research with heterosexual men.

## Literary Search Strategies

I searched in PsycARTICLES, SocINDEX, MEDLINE, PsycINFO, and records of dissertation studies for literature focusing on media, family, and peer influences associated with body satisfaction in Black men. Key search terms were *body satisfaction*, *media, family and peer influences on body image*, *ethnic*, *ethnicity*, *race*, *Black men*, *African American men*, *Black adolescent boys*, *African American adolescent boys*, *body image in Black men*, *internalization of cultural standards in Black heterosexual men and boys*, *drives for muscularity in Black heterosexual men and boys*, and *body satisfaction in Black heterosexual men*. I was unable to find any literature regarding internalization of cultural appearance standards; media, family, and peer influences; or drive for muscularity and body satisfaction among Black heterosexual men.

## Body Satisfaction

*Body satisfaction* can be defined as a person's favorable evaluation of his or her body (Stice & Shaw, 2002). These evaluations are strongly influenced by comparisons made with others (Festinger, 1954). Body comparisons may be socially influenced in that ideal appearances are created, modeled, and reinforced in sociocultural contexts by others, including the media (Jones & Crawford, 2006; Shroff &Thompson, 2006). In addition, unfavorable comparisons are widespread and can lead to unhealthy behaviors and serious health risks (Jankowski, Diedrichs, & Halliwell, 2013). Steroid use, disordered eating behaviors (anorexia and bulimia), depression, low self-esteem, social anxiety, and feeling unattractive are some of the behaviors that may result when people unfavorably compare themselves to others (Drewes, 2005; Ferguson, 2013; Smolak,

Murnen, & Thompson, 2005; Stice & Shaw, 2002; Jones, 2004; Thompson et al., 1999). Given what is known about unhealthy behaviors and health risks associated with low body satisfaction, I sought to find out if there were differences between Black and White heterosexual college men's levels of body satisfaction and determine whether race moderated the relations between body satisfaction and the predictor measures.

Interest in body satisfaction can be traced to the rise in interest in eating disorders such as anorexia and bulimia (Keel, Klump, & Leon, 1998; Thompson et al., 1999). Stormer and Thompson (1996) and Hemal and Thompson (2006) agreed that most research on body satisfaction has been conducted with White women. For instance, Thompson et al. (1999) used primarily White women and girls to examine eating habits associated with body satisfaction. Similarly, Mercurio and Rima (2011) used primarily White women in their study on body surveillance as a mediator for self-weighting and body satisfaction. In addition, Grabe and Hyde (2006) did a meta-analysis of 98 body satisfaction studies that used primarily White women. Myers and Crowthers (2009) also did a meta-analysis of 156 studies that used primarily women to examine social comparison and body satisfaction.

White women have also been used for comparisons when examining body satisfaction among Black women (Altabe & O'Garo, 2002; Grabe & Hyde, 2006; Roberts et al., 2006). Researchers have generally found that Black women have greater body satisfaction than White women. For instance, Grabe and Hyde's (2006) meta-analysis of 98 studies published between 1991 and 2004 indicated that Black women had greater body satisfaction than White women. However, the effect size associated with this racial

difference fell in the low range, with a Cohen's *d* of .29 (Grabe & Hyde, 2006). Similarly, in their meta-analyses of 55 studies published between 1967 and 2002, Roberts et al. (2006) found evidence that White women were less likely to report body satisfaction than Black women. Racial differences found in Roberts et al. (2006) meta-analysis were also in the low range, with a Cohen's *d* of .28. Although differences in the studies examined were small, differences were found to exist in body satisfaction between Black and White women. Given these differences between Black and White women, this study sought to determine whether parallel differences existed between Black and White heterosexual men.

Researchers have attempted to explain why Black women experience greater body satisfaction than White women. For instance, Streigel-Moore et al. (1995) argued that Black and White women face different social pressures regarding body image and found that White women reported more pressure to be thin than Black women did. This may be because Black men tend to prefer Black women who have curvy or thick (but not obese) bodies, as characterized by large buttocks, full breasts, and wide hips (Jackson & McGill, 1996; Molly & Herzberger, 1998). In addition, Black men in Thompson et al. (1996) study reported that women with small bodies were less attractive than women with larger bodies. In contrast, White men tend to prefer women with slender body types and to rate slender bodies as more feminine than larger bodies (Glasser et al., 2009). Similarly, Roberts, Cunningham, and Dreher's (2012) study with 60 college men (30 Black men and 30 White men) found that White men reported more concerns about their dates' body types, preferred to date women with thin bodies, and were more likely than Black men to

pressure their dates to be thinner. They also found that women, regardless of their race, who dated White men reported having thinner bodies and lower body satisfaction, and reported that their bodies were less accepted by their dates than women who dated Black men.

Similar to Roberts, Cunningham, and Dreher's (2012) study on men's body type preference in women they date, Glasser, Robnett, and Feliciano (2009) examined 2,155 women's body type preferences for the men they dated. They found that fit and athletic bodies were preferred by 1,865 of women in the study, with 13% of the women indicating that they would only date men with this body type. Given these research findings for women, this study examined differences in perceived social pressures between Black and White heterosexual college-aged men to have ideal body types.

As evidenced by the existing literature, a good deal is known about body satisfaction and, to a lesser extent, differences in body satisfaction between Black and White women. In addition, it has been well established that media, family, and peers influence body satisfaction among women (Drewes, 2005; Menzel et al., 2011; Thompson et al., 1999). However, there has been far less research describing how media, family, and peers influence body satisfaction among heterosexual men, and none of the available research has addressed these influences in heterosexual Black men. In addition, the moderating effects of race on media, family, and peer influences among heterosexual men have never been reported. This research, in part, addressed these gaps.

## Body Satisfaction and Sociocultural Influences

Researchers have found that sociocultural variables strongly influence body satisfaction in women (Thompson et al., 1999). Similar influences have been reported in men (Karazsia & Crowther, 2009, 2010; Smolak et al., 2005). However, these influences emphasize different body features for men and for women. The influences on women emphasize the importance of slenderness (the thin body ideal) and how to eat, exercise, and dress to achieve it (Thompson et al., 1999). However, the same sociocultural influences pressure men to be muscular with low levels of body fat (Cafri & Thompson, 2004). This is often called the *muscular ideal*. These influences also encourage men to compare themselves with other men (Smolak et al., 2005). Smolak et al. (2005) examined media, peer, and family influences among 383 boys (91% White) who wanted to build muscles. The researchers reported that the boys had body image concerns that led to muscle building exercises such as lifting weights. Similarly, Smolak et al. (2005) found that media images influenced boys' desires for bigger muscles. In addition, the boys who wanted larger muscles also had friends who desired larger muscles. The study results also showed that the boys' parents played an important role in their body image concerns. Negative body comments (e.g., "you have small muscles") from parents influenced muscle building exercises (Smolak et al., 2005). Taken as a whole, the results of research on social influences on men's body satisfaction appear to be similar to those found with women. Although there is a large gender difference in the body ideals that are pursued (i.e., muscularity for men and thinness for women), the mechanism of social comparisons and tripartite social influences are similar.

Theoretical models explaining body satisfaction have been dominated by research conducted on women (McCabe & Ricciardelli, 2004). Groesz, Levine, and Murnen's (2002) meta-analysis of 25 studies (43 effect sizes) found that exposure to thin-ideal media images influenced negative body images and low body satisfaction among women. Tucci and Peters (2008) found that body satisfaction decreased among these college women after being exposed to thin media images. However, exposure to thin-ideal images may differ with the participant's perception of her own body. Henderson-King and Henderson-King (1997) found that heavy women who watched videos featuring thin women were less likely to be satisfied with their bodies.

According to Morrison and Morrison (2003), media "influence men's perceptions on what constitutes an ideal body" (p. 111). Lavine, Sweeney, and Wagner's (1999) investigation of images seen in commercials indicated that men exposed to muscular images developed negative self-images. Leit, Gray, and Pope (2002) studied two groups of male college students (78% White). The experimental group was shown nothing but commercials with muscular images. The control group was shown commercials with general images. The researchers found that the members of the experimental group were more dissatisfied with their bodies. Barlett, Vowels, and Saucier's (2008) two meta-analyses found that the more pressure men felt from media images to have ideal bodies, the worse they felt about their bodies.

Male action figures have also influenced men's body image concerns. For instance, Pope et al. (1999) examined the physical appearance of action figures produced over a 30-year span and found that as the bodies of action figures became increasingly

muscular, men's body image concerns and body dissatisfaction increased. Not surprisingly, Farquhar and Wasylkiw (2007) reported that changes in G.I. Joe's body composition over time reflected changes in society's definitions of ideal body types. In a span of 30 years, G.I. Joe's biceps grew from around 12 inches to around 26 inches. Although G.I. Joe is a toy, his presence has influenced men and boys to want unattainable bodies and envision themselves as being similar to heroic characters seen on television (Farquhar & Waylkiw, 2007).

Men may develop attitudes and behaviors about their bodies from social messages. For instance, Schuster et al. (2013) found that while there are still many more television commercials focusing on women, the number of commercials focusing on men's bodies has increased. These commercials emphasize that muscular bodies are central elements in male attractiveness (Barlett, Vowells, & Saucier, 2008). In addition, social messages can be either positive or negative, with differing attitudes and behavioral effects.

Researchers have found that men who receive positive comments about their appearances are less likely to develop issues with eating and have greater body satisfaction than men who receive negative comments about their appearances (Schuster et al., 2013). For instance, Schuster et al. (2013) studied 454 college men and found that positive comments about appearances influenced participants to engage in muscle-building exercises. In addition, study participants who received positive comments about their appearance reported satisfaction with their appearance. Conversely, participants who received negative comments about their appearance were not satisfied with their

bodies, had concerns about physical appearance (e.g., weight and hair), and were at increased risk of developing eating disorders. The Schuster et al. study provided compelling support for theoretical ideas that society can influence body satisfaction in men. However, there were two significant limitations associated with this study. First, the sample size for Black men was only 21, or 4.8% of the total number of participants in the study. Second, the researchers did not identify the source of the negative or positive comments. Unfortunately, the sample was too small to assess differences between Black and White men regarding body satisfaction.

Researchers have found that the family has an important influence on how individuals view their bodies. There is evidence that family plays an important role in body satisfaction among women (Green & Pritchard, 2003; Vincent & McCabe, 2000). For example, criticism from family regarding body shapes, weight, and body types or family endorsements of the unrealistic body ideals shown in the media are associated with decreased body satisfaction among women (Fabian & Thompson, 1989; Gleason et al., 2000). Similarly, there is evidence that family also plays a role in body satisfaction among men. For example, messages from parents encouraged boys (91% White) to compare their bodies with other boys' bodies (Smolak, Murnen, & Thompson, 2005), and these comparisons were used as motivational strategies by parents (Johnson & Stapel, 2010). In addition, Rogers, Faure, and Chabrol (2009) found that criticisms from fathers were better predictors of body satisfaction than criticisms from mothers. However, the researchers did find that criticism from mothers motivated men to be thin. These results suggested that social influences might play an important role in men's body satisfaction,

just as they do with women's body satisfaction. I examined differences in social influences associated with body satisfaction between Black and White heterosexual men using the modified Perceived Social Pressure Scale (Forbes & Jung, 2014; Stice, 1996).

Just as research has shown the importance of family influences, there is considerable research indicating the importance of peer influences on body satisfaction. Nearly all of this research has been done with women (Rayner et al., 2013). The research has shown that peer influence on body satisfaction begins at early ages. For example, Dohnt and Tiggeman (2005) investigated peer influences on body satisfaction using girls between the ages of 5 and 8. They found that girls commonly desired to be thin; that the girls actively compared their bodies to other girls' bodies; and that girls' body satisfaction decreased with age. Similarly, Clark and Tiggeman (2006) examined peer influences on body satisfaction among girls age 9 to 12 years. They found that peer interactions influenced girls' internalization of the desire to be thin as an ideal. Importantly, both of these studies showed that peer influences on body satisfaction are pervasive, cultural, and are often long-term. ## search at this point if to see if change to whether is indicated.

Given what was known about peer influences among women, it seemed likely that similar influences would be present in men. The limited research suggested that this would be the case. For instance, Lawler and Nixon (2011) found that criticism from peers regarding physical appearance influenced body satisfaction for boys (all White). In addition, criticism from peers helped create social standards; helped cultural expectations; and allowed people to learn, understand, and know their social status (Lawler & Nixon, 2011; Johnson & Stapel, 2011). Similarly, Galli and Reel (2009)

reported that 80% of the men (all White) in their study felt their body satisfaction and body image concerns were influenced by peers and media images. Additionally, the participants reported that they compared their bodies to athletes' bodies and felt pressure to have similar bodies.

As evidenced by the studies I reviewed, media, family, and peers were important sociocultural influences in the body satisfaction among White men. Although some studies included samples of Black men, the samples were too small to allow for racial comparisons. As a consequence, it was unclear whether Black heterosexual men experience similar influences as White heterosexual men. This study addressed that gap.

**Male and Female Body Satisfaction Comparisons**

In the past, women were the primary focus for television commercials related to physical attractiveness (Sobieraj, 1996). Women and girls were inundated with social messages that thinness was central to their attractiveness (Barlett, Vowells, & Saucier, 2008). Thinness, along with weight loss, seemed to be the primary concern for women and girls. Concerns with weight loss and thinness result from increasingly strong preferences, by both men and women, for thin and petite women's bodies (Cafri & Thompson, 2004; Garner, Garfinkle, Schwartz, & Thompson, 1980; Silverstein, Peterson, & Perdue, 1986). In view of this emphasis, it was not surprising that Calzo et al. (2013) and Smolak and Murnen (2008) found that body satisfaction for women and girls has focused on weight loss and thinness.

Pope, Phillips, and Olivardia's (2000) examined men's body dissatisfaction in 1972, 1985, and 1997 and found that body dissatisfaction increased from 15% in 1972 to

34% in 1985 to 43% in 1997. They also found that men and boys' dissatisfaction with their overall appearances increased with age (19% for ages 13-19, 48% for ages 50-59). Pope et al. also examined the behaviors men and boys exhibited to achieve ideal bodies. Some of these included smoking, vomiting, and compulsive exercise. Their important book alerted society to the importance of studying the nature, origin, and effects of body dissatisfaction in men and boys.

Young men and boys feel pressures from media, family, and peers to have muscular bodies (Cohane & Pope, 2001). Desires for muscular bodies correlated with increased social and interpersonal demands men faced to obtain and sustain muscular bodies (Thompson & Cafri, 2007). In addition, Thompson and Cafri identified risk factors such as extreme dieting and steroid use to obtain muscular ideals. Their important work examined the complexities related to biological, psychological, sports, and social factors that may influence muscular desires in men.

Steinfeldt, Gilcrist, Halterman, Gomory, and Steinfeldt (2011) report two important motives for the drive for muscularity among men. The first motive was having sex appeal and ideal physical appearance (e.g., muscles). The second was the desire for optimal athletic performances and reducing injuries. In addition, studies have suggested that men also have weight loss concerns. For instance, Jones and Crawford (2005) studied weight and muscularity concerns among adolescent boys (69% White, no reported Black participants). Overweight boys reported body satisfaction concerns that were similar to adolescent girls. That is, the boys were more focused on losing weight than having muscular bodies. Conversely, Jones and Crawford found that adolescent

boys with lower body mass indexes (BMIs) also experienced body satisfaction concerns. However, their concerns focused on improving muscularity by gaining weight. Findings from Jones and Crawford and Steinfeldt et al. suggested that boys and men have socially influenced internalized concerns regarding their body sizes and shapes. In general, research shows that unlike girls and women, whose body satisfaction are strongly focused on losing weight, boys and men want to lose weight associated with fat and increase weight associated with muscle (Cohane & Pope, 2001; Thompson & Cafri, 2007). It was unknown whether there are differences in how Black and White heterosexual men experience body dissatisfaction.

Researchers have suggested that differences in body satisfaction between Black and White women may result from racial differences in cultural appearance standards and ideals (Capodilupo & Kim, 2013). For instance, White women who identify with mainstream (e.g., White) cultural standards typically endorse and desire thin bodies (Devos & Banaji, 2005; Halliwell & Dittmar, 2004; Halliwell, Dittmar, & Hall, 2005). However, the overall average size for American women ranges from size 12 to size 14. Consequently, given the differences between ideal body size (thin) and actual average body size (e.g., 12 to 14), these women may experience lower body satisfaction than women who do not identify with mainstream cultural appearance standards.

Black women also have concerns with body image. However, researchers have suggested that Black women find bigger, thicker, and more curvaceous bodies more attractive than other groups of women and are less likely to desire thin bodies (Craig, 2006; Gluck & Geliebter, 2002). This may be because, as media images of White women

have decreased in size over the years, media images of Black women have increased in size. In addition, Black women who identify with Black cultural appearance standards have greater body satisfaction than White women who usually identify with mainstream cultural appearance standards (Dawson-Andoh, Gray, Soto, & Parker, 2011; Turnage, 2004).

The studies I reviewed found differences in cultural appearance standards between Black and White women. Black women are encouraged to have thicker and curvaceous bodies and White women are encouraged to have thin bodies (Devos & Banaji, 2005; Halliwell & Dittmar, 2004; Halliwell, Dittmar, & Hall, 2005). In addition, these studies have shown that similar cultural factors (i.e., media, parents, and peers) encourage and influence men and boys to have muscular and/or athletic bodies (Cafri, 2007; Cohane & Pope, 2001; Steinfeldt's et al., 2011). Moreover, these studies have found that Black women, White women, and White men are exposed to similar risk factors (i.e., disordered eating, excessive dieting, excessive weight lifting, and steroid use) and have shown that these risk factors play a role in body satisfaction and dissatisfaction (Pope et al., 2000; Thompson et al., 1996). Unfortunately, none of these studies included meaningful numbers of Black men to determine whether Black men have similarly experienced body satisfaction and/or dissatisfaction as Black women, White women, and White men have.

Studies have shown that whether women internalize White cultural appearance standards (i.e., thin bodies), they have a lot more body dissatisfaction than if they internalize Black cultural appearance standards (i.e., thicker bodies) (Dawson-Andoh,

Gray, Soto, & Parker, 2011; Turnage, 2004). It was unknown whether this was the case among Black and White heterosexual men, as no studies had examined differences in cultural appearance standards between Black and White heterosexual men.

While studies have shown that Black and White women and White men share the same mechanisms (i.e., media, parents, and peers) involved in cultural appearance standards, none of these studies included meaningful numbers of Black men to determine if Black men receive the same or different messages from these mechanisms or whether Black men have the same or different cultural appearance standards (i.e., muscular satisfaction) as White men. This study was the first to use the PSPS to determine differences in internalized cultural appearance standards between Black and White heterosexual college-aged men.

## Internalization and Body Satisfaction

Internalization is the psychological process in which people take external values and incorporate them into their own personalities (Thompson et al., 1999). People then use these incorporated (internalized) standards to judge their own bodies. Internalization is seemingly unavoidable because people compare themselves to others daily (Festinger, 1954) and internalization may also reflect social values (Menzel et al., 2011). Although the process of internalization appears to play a crucial role in body satisfaction for both men and women, many of the studies on internalization have focused on women. For example, Henderson-King and Henderson-King (1997) examined media effects on women's body image perceptions (internalization) and found that thin women who watched videos featuring thin-idea women reported greater body satisfaction than heavier

women who watched the same study videos. Thompson et al. (1999) examined eating habits and body image, and found that eating disorders (e.g., anorexia, bulimia, and binge eating) developed as a result of internalized perceptions of socially accepted body ideals. Groesz, Levine, and Murnen's (2002) meta-analysis of 25 studies (43 effect sizes) found that exposure to thin-ideal media images influenced negatively internalized body images and low body satisfaction among women. Similarly, Tucci and Peters (2008) examined exposures to media images among college women, and found that body satisfaction decrease among these college women after being exposed to thin media images. Recently, Bell and Dittmar (2011) examined internalization associated with media (e.g., television shows, music videos, Internet, and magazines) influences on body satisfaction, and found that constant and continuous exposure to thin-ideal body types influenced internalized negative feelings concerning the viewers' bodies.

Studies have also examined internalization associated with body image and body satisfaction among heterosexual men. For example, Lavine, Sweeney, and Wagner (1999) found that men exposed to muscular images developed internalized negative self-images in comparison to men who were not exposed to muscular images. Morry and Staska (2001) included men in a study that examined the relationship between magazine exposures of ideal bodies, body satisfaction, and internalization. The researchers found that magazine images predicted body satisfaction and mediated internalization among the men in their study. Similarly, Karazsia and Crowther (2010) examined social comparison, social influences, and internalization associated with men's body

satisfaction, and found that social influences mediated internalization and social comparison.

In summary, the studies reviewed in this section demonstrated that social influences play a role in internalized body images and body satisfaction. However, one limitation to the studies reviewed was the limited research demonstrating the influence of these variables on Black men's body satisfaction. Black and White heterosexual men may be subject to the same kinds of social influences. However, whether Black and White heterosexual men compare themselves to different cultural appearance standards, this could produce differences between the two groups in their levels of body satisfaction. This study is the first to collectively examine these variables in order to determine whether Black heterosexual men have similar body satisfaction experiences as Black and White women and White men.

## Scope of the Problem

Although women's concerns have been the primary focus of body satisfaction research, researchers have found that heterosexual men have become more concerned with their body image (McFarland & Petrie, 2012; Mulgrew, Johnson, Lane, & Katsikitis, 2013; Peplau, Frederick, Yee, Maisel, Lever, & Ghavami, 2009; Waine, 2009). However, one major limitation in the heterosexual men's body satisfaction research is the small numbers of heterosexual Black men included in this research. One purpose of this study was to determine the extent to which media, family, and peer influences; internalization; and drives for muscularity that are known to be associated with body satisfaction among White heterosexual men would have similar influences among Black

heterosexual college men. This was important for two reasons. First, it addressed gaps in the body satisfaction literature. Second, it could help to determine whether interventions intended to mitigate risks associated with body satisfaction need to have gender and race specific components.

The following section focused on the social comparison theory and tripartite influences model as they apply to body satisfaction. The section supported this study's purpose of addressing media, family, and peer influences; internalization of cultural appearance standards; and drives for muscularity associated with body satisfaction issues among Black and White men. The section also supported the purpose to examine differences in body satisfaction between Black and White men.

## Theoretical and Conceptual Framework

### Social comparison theory

Social psychologist Leon Festinger introduced the social comparison theory in 1954. Festinger (1954) hypothesized that people have natural tendencies to compare themselves to people with similar characteristics as them (Festinger, 1954; Suls, Martin & Wheeler, 2002; Warren & Rios, 2012). Festinger called this type of comparison appearance-focused comparison. When making appearance-focused comparisons, people compare their physical attributes and attitudes to that of others (Suls, Martin, & Wheeler, 2002). Festinger explained that appearance-focused comparisons are made so people could subjectively evaluate themselves in order to gain better understandings of their own abilities. For example, people may compare their bodies to muscular, thin, athletic,

and/or toned bodies. These people are then able to understand what they need to do in order to improve their own physical appearances.

There are two types of social comparisons. The first type is downward comparison. This type of comparison occurs when people compare themselves to people they view as inferior to them (Ridolfi, Myers, Crowther, & Ciesla, 2011). The people who are perceived as being inferior are the ones that may have fewer accomplishments and/or are perceived to have less physically attractive features. Downward comparison can produce positive self-images and/or feelings of superiority (Myers & Crowther, 2009). In addition, Wills (1981) theorized that downward comparisons may become motivational when people feel unhappy about themselves. For example, swimsuit models may feel better about themselves after comparing their bodies to the bodies of obese people.

The second type of social comparison is upward comparison. This type of comparison occurs when people compare themselves to people they view are superior. People perceived as being superior may have more accomplishments and/or may be perceived as having more physically attractive features. Upward comparison allows people to develop self-identities, standards, and self-evaluations (Marsh et al., 2010; Warren & Rios, 2012). These self-evaluations are often self-defeating and can negatively affect a person's self-esteem (Isobe & Ura, 2006; Myers & Crowther, 2009; Woods, Michela, & Giordano, 2000). For example, obese people may develop negative self-feelings after comparing their bodies to the bodies of swimsuit models. However, Johnson and Stapel (2010) argued that upward comparison can also motivate and inspire

people to work harder at achieving goals. For example, obese people may become inspired to lose weight after they observe their favorite celebrity losing weight. Another example is that of a rookie (1st year) basketball player who may become motivated to work at improving his basketball skills after comparing his skills to Kobe Bryant's (Los Angeles Lakers basketball player) basketball skills.

**Social Comparison Expansion and Research**

The social comparison theory was not widely used in body image research until the early 1980s. Wills (1981) expanded Festinger's original theory by using concepts such as scapegoat, social prejudice, attraction, aggression, and projection as mediators for social comparisons. Wills also argued that negative self-feelings may be enhanced or eliminated when people compared themselves to other people. In addition, Taylor, Wood, and Lichtman (1983) included downward comparison in their research on rape victims. They found that rape victims minimized their experiences by selectively comparing what happened to them to other rape victims who they perceived had worse experiences than they had. Taylor, Wood, and Lichtman found that downward comparisons allowed raped victims to produce self-enhancements, and also allowed rape victims to view their victimization as less aversive. In addition, more favorable views allowed rape victims to minimizing damages associated with their own experiences.

Taylor and Lobel (1989) later provided a structure to predict what kinds of comparisons people would choose to use in a given situation. They surmised that people made downward comparisons when there were perceived threats to their self-image. Conversely, upward comparisons were used to gather information about the self (Taylor

& Lobel, 1989). The works of Taylor et al. and Taylor and Lobel indicated that both upward and downward comparisons were used for adaptive purposes.

Dijkstra, Gibbons, and Buunk (2010) reported that social comparisons are central and important to everyday living. Wheeler and Miyake (1992) conducted a 2-week study on 94 college students and found that subjective well-being increased following downward comparisons, but decreased following upward comparisons. Johnson and Stapel (2010) used social comparison to study people's motivation to pursue goals. They found that motivation increased after participants were exposed to upward social comparisons targets who had achieved more than they had. Johnson and Stapel argued that people have strong motivations to be like their comparison targets.

Locke (2011) used social comparison to study how people evaluate their performances when in competition with other people and found evidence that competition was associated with upward comparison. Participants in the study reported higher performance levels when competing against comparison targets that they admired (Locke, 2011). Conversely, participants reported lower performance levels when competing against comparison targets they did not admire. Locke's findings supported Festinger's initial assertion that people make comparisons with people they are socially connected to.

As evidenced by the literature reviewed in this section, social comparison theory has been an important framework for understanding how people compare themselves to others in order to shape their own self-perceptions. During the mid-1980s, Thompson and his associates (Thompson et al., 1999) began to apply the social comparison theory in

body satisfaction studies. They were the first researchers to identify three influences associated with body satisfaction, body image issues, and disordered eating among women (Thompson et al., 1999). In addition, Thompson and his associates suggested that many or most of these influences originated from three reasonably independent sources (i.e., media, family, and friends). This approach is generally known as the tripartite influence model.

## Tripartite Influence Model

J. Kevin Thompson and his associates developed the Tripartite Influence Model from their interest in body satisfaction and unhealthy eating patterns (e.g. anorexia and bulimia) in women and girls (Drewes, 2005; Thompson et al., 1999). The Tripartite Influence Model, which is closely related to the sociocultural theory (Thompson et al., 1999), emerged after several decades of research on factors associated with body satisfaction and unhealthy eating patterns. Thompson et al. found that body shapes and weight were predictors of unhealthy eating patterns. In addition, media, family, and peer influences and mediating factors (social comparison and internalized perceptions of body ideals) associated with body satisfaction were examined (Menzel et al., 2011). This examination included media images that focused on specific physical features. For example, slenderness was a feature. After repeated exposure to slender images, women and girls learned to use the slender images to evaluate their own bodies. Self-evaluations indicated that external appearance ideals were internalized as appropriate personal standards by women. In addition, Menzel et al. found that self-evaluations and body ideals were reflections of social values.

Important findings have also come from tripartite influence research using men. For instance, Hardit and Hannum (2012) investigated which of the three tripartite influences (media, family, and peers) were better at predicting body satisfaction in men. Media influences were found to be better at predicting body satisfaction than peer and family influences (Hardit & Hannum, 2012). Media may be a better predictor of body satisfaction because it is a wider reaching platform that endorses cultural appearance ideals (Lawler & Nixon, 2011). Unfortunately, these studies did not investigate differences between Black and White heterosexual men. Therefore, it was not clear whether there were body satisfaction differences between the two groups of men.

Jung and Forbes (2010) offered clear evidence that differences associated with body satisfaction between Black ($n$ = 82) and White ($n$ = 223) adolescent boys were similar to differences found between Black and White women. That is, the presence of differences depended on how body satisfaction was measured. Just as studies of women have shown that Black and White women do not differ in body satisfaction based on figure rating scales, but do differ on questionnaire measures, Jung and Forbes found that there were no differences on the figure ratings. Black boys had greater body satisfaction than White boys on the body questionnaire measures.

The tripartite model is a sophisticated and nuanced theory. An important reason tripartite theory has been so influential is that it recognizes there are multiple, reasonably, independent determinants of body ideals. Each determinant includes influences that may lead to body satisfaction or dissatisfaction issues. In addition, each determinant may

have the potential to offer some protection against body satisfaction issues and the drive for muscularity issues.

## Drive for Muscularity

Men's concerns with muscularity have been so pervasive that they have been hypothesized to reflect a specific motivational state labeled a drive for muscularity (Calzo et al., 2013; Smolak and Stein, 2006; Steinfeldt, Gilcrist, Halterman, Gomory, & Steinfeldt, 2011). This drive referred to a strong, sometimes almost obsessive, motivation to develop additional muscle mass (Bergeron &Tylka, 2007).

Studies suggested that drive for muscularity is ubiquitous, particularly in Western cultures. For instance, Frederick et al. (2007) examined men's muscular ideals and body satisfaction in three international locations (USA, Ghana, and the Ukraine). They found that up to 71% of U.S. men were not satisfied with their bodies, over 90% of U.S. college men desired more muscular bodies compared to 69% Ukrainian men and 49% Ghanaian men. Research has found that men's ideas about muscularity are influenced by media, family, siblings, and peers (Karazsia & Crowther, 2009). Calzo et al. (2013) examined muscularity and weight concerns in 5,868 adolescent males (93% White), whose ages ranged from 9 to 25, and found that the desire for bigger muscles increased with age. Leit, Gray, and Pope (2001) studied media images and body image in mostly White college men (78%). The experimental group was shown commercials with muscular images. The control group was shown commercials with non-muscular images. Results showed that the experimental group had less body satisfaction than the control group. Conversely, in their experimental study of muscularity and media image exposures in

primarily White men (3% Black men), Michaels, Parent, and Moradi (2012) found inconsistent evidence that exposure to muscular images influenced body image issues or muscularity desires in participants. These inconsistencies indicated exposure to media images may be as strong of a predictor of body satisfaction as indicated by previous research.

Steinfeldt et al. examined drives for muscularity among college football players. This included 10% Black players. They found that drives for muscularity was associated with standards created by peers. Some examples of these standards may have included being able to lift large amounts of weights and the ability to hit opponents harder than other players. Bennett examined parental influences and drive for muscularity, and found that praise from fathers for athletic performances were associated with drive for masculinity in boys. In addition, the research found that boys' perceptions of their fathers' muscularity were associated with their own drives for muscularity.

As noted in chapter 1, current studies do not include large enough Black samples to determine whether heterosexual Black men experience similar influences from media, family, and peers as White men. An aim of this study was to examine differences in body satisfaction experiences between Black and White college-aged men.

## Measures

I used four body satisfaction measures (Appearance, Weight, Attribution and WMFDS) and four predictor measures (PSPS, Internalization-general, DMS-Behavior, and DMS-Attitude) in this study. Grabe and Hyde's (2006) meta-analysis found that using multiple measures to examine body satisfaction was necessary because of the

multiple sources that influence body satisfaction. Similarly, Roberts' et al. (2006) meta-analysis found that the size and differences in body satisfaction depend on the type of measure used. In addition, Jung and Forbes (2010) used multiple measures to examine differences in body satisfaction and found differences between Black and White adolescent boys on the BESAA-attribution subscale.

In this study, I used multiple measures to assess body satisfaction. Using multiple measures to assess the same variables could have created multicollinearity. Multicollinearity is a potential problem that may occur in a regression analysis when there is moderate to high intercorrelations among predictor variables (Lin, 2008). A detailed description for each measure and how I addressed multicollinearity are provided in Chapter 3.

**Body Satisfaction Measures**

Body-Esteem Scale for Adolescents and Adults (BESAA). The BESAA is a 23-item body satisfaction scale that measures attitudes about appearances and weight over three subscales (appearance, weight, and attribution) (Mendelson, White, & Mendelson, 1997). The BE-appearance subscale assesses attitudes regarding satisfaction with general appearance; the BE-weight subscale assesses attitudes regarding weight satisfaction; and BE-attribution subscale assesses the participants' perceptions of how others evaluate the participants' appearance. Mendelson, Mendelson, and White (2001) used BESAA to assess body esteem in adults and adolescents. This included 763 women and girls and 571 men and boys. They found that women and girls scored lower that men and boys on the Body-Esteem Weight (satisfaction) and Body-Esteem Appearance (feelings about

appearance) subscales. Study findings indicated gender differences in attitudes and feeling about weight and appearances.

Researchers have used the BESAA to examine attitudes about weight and appearances. For instance, Green and Pritchard (2003) included the BESAA in their study that examined predictors of body image dissatisfaction in both men and women. Madan, Beech, and Tichansky (2008) included the BESAA to assess body esteem before and after cosmetic surgery. Participants in the study reported better scores after surgery than before surgery. In addition, Forbes and Jung (2014) used BESAA investigated effects of family and peer pressures on appearances. They found evidence that pressures from family and friends effected attitudes and beliefs about appearances.

Jung and Forbes (2010) found differences on the BESAA-attribution subscale between Black and White adolescent boys. This difference indicated that Black boys, as compared with White boys, were more confident that other people liked than appearance. There were no differences on the BESAA appearance and the weight satisfaction subscales. These results are important because they provided the only clear empirical evidence that indicated differences in body satisfaction exist between Black and White boys. I have not found any studies that examine differences between Black and White heterosexual men using the BESAA or any other measure of body satisfaction. I used the BESAA to determine whether there were differences in attitudes between Black and White heterosexual college-aged men on the three subscales (appearance, weight, and attribution).

**Winitch Male Figure Drawing Scale**. The Winitch Male Figure Drawing Scale is a scale consisting of nine male body silhouettes arranged in order of increasing muscularity (Lynch & Zellner, 1999). Lynch and Zellner used the Winitch scale to assess which body type college men and women thought were attractive. Lynch and Zellner found that men wanted more muscular bodies. Men may have wanted bigger muscles because men believed women preferred muscular body types (Lynch & Zellner, 1999). Although women participants preferred men's bodies that were larger than that of college men, their preference for muscular bodies was less exaggerated than the preferences of men (Lynch & Zellner, 1999).

Thompson and Gray (1995) found that the majority of rating scales focused on body fat and weight loss for girls and women. I chose the Winitch scale because it is the only conventional figure rating scale that reflects muscularity rather than body fat. I used this scale to measure ideal body types. I also used this measure to determine differences in actual body types between Black and White heterosexual college-age men. The scale was also used to measure differences in muscle satisfaction between Black and White heterosexual college-age men.

**Predictor Measures**

**Perceived Sociocultural Pressure Scale (PSPS)**. The PSPS is a predictor measure that was created to measure how much people felt they were influenced by the media, parents, friends, and dates to be thin (Stice, 2001; Stice et al., 1996). PSPS has been widely included in a variety of studies. For instance, Stice and Agras (1998) included the PSPS in a longitudinal study to assess the onset and cessation of bulimia in

adolescence. Stice, Spangler, and Agras (2001) included the PSPS in a longitudinal experiment to assess influences exposure of media images have on girls. Standford and McCabe (2002) included the PSPS to examine gender differences in perceived influences on different body parts. Forbes and Jung (2008) included PSPS to examine cultural standards and body dissatisfaction among Korean and U.S. college women.

I chose to use the PSPS in my study because this scale examined variables that are the heart of the tripartite influence model and are not addressed by the other scales being used in my study. I also chose the PSPS because it measures the extent to which people report pressure to look in certain ways. However, it does not measure the degree to which people respond to these pressures. I used Forbes and Jung's (2014) modified version that was adapted to measure social pressures to be muscular and fit among boys to determine whether there were differences in perceived pressures to conform to cultural appearance standards between Black and White heterosexual college-aged men and differences in the strength of the different sources of these pressures.

**Internalization—General subscale of the Sociocultural Attitudes Toward Appearance Questionnaire.** The SATAQ-3 was created by Thompson, van den Berg, Roehrig, Guarda, and Heinberg (2004) to assess internalized attitudes, social pressures, and social influences towards appearances. The SATAQ-3 is a revised version of the SATAQ and the SATAQ-R (Thompson, et al., 1999). The SATAQ-3 is a self-report measure with 30 items over four subscales (internalization general; internalization athletic; information; and pressures). I used the SATAQ-3 internalization-general

subscale because this nine item subscale focuses only on the extent to which cultural appearance standards are internalized.

The SATAQ-3 is one of the most commonly used measures to assess attitudes and internalized pressures regarding appearances (Warren, Gleaves, & Rakhkovskaya, 2013). I used this measure to determine whether there were differences in internalization between Black and White heterosexual college-age men.

**The Drive for Muscularity Scale**. The DMS is a comprehensive scale that assesses both men's desires to be muscular and men's behaviors to achieve muscularity (Bergeron &Tylka, 2007; McCreary et al., 2004). The DMS is a 15-item measure. In addition, racial differences among females have been assessed using the DMS. For example, Steinfeldt et al. (2011) included the DSM in their study that examined muscularity beliefs in women college athletes. This included 12% Black athletes. The researchers found that women athletes also experience drive for muscularity. In addition, women athletes reported significantly higher drive for muscularity than women students who were not athletes (Steinfeldt et al., 2011). However, there were no significant differences reported.

In addition to the DMS, a number of measures have been developed to assess muscularity. These measures include, but are not limited to, the Swansea Muscularity Attitudes Questionnaire (SMAQ; Edwards & Launder, 2000); Body Appreciation Scale (BAS; Avalos, Tylka, & Wood-Barcalow, 2005); Masculine Body Ideal Distress Scale (MBIDS; Kimmel & Mahalick, 2004). I chose to use McCreary's et al. (2004) DMS because of Cafri and Thompson's (2004) proposal that the assessment of men's body

image should be "centered on a muscular appearance" (p. 25). Cafri and Thompson reviewed 13 measures of body image and concluded that the DMS was one of the most effective best practice measures used in body satisfaction research.

I used the DMS to determine whether there were differences in the drive for muscularity between Black and White heterosexual college men. The role muscularity plays in predicting global body satisfaction among Black and White heterosexual college-aged men was also measured.

## Summary

In summary, body satisfaction research has traditionally focused on White women and girls (Roberts et al., 2006; Thompson et al., 1999). However, research has shown that men and boys also have concerns with body satisfaction (Karazsia & Crowther, 2009; Leit, Gray, & Pope, Jr., 2001; Morrison & Morrison, 2003). In addition, researchers have found that tripartite influences contribute to issues with body satisfaction in men (Drewes, 2005; Green, & Pritchard, 2003; Hardit &Hannum, 2012; Menzel et al, 2011; Stice, & Whitenton, 2002; Thompson et al., 1999). However, tripartite influences associated with body satisfaction may be more inconsistent in men than in women (Lorenzen, Grieve, & Thomas, 2004). In addition, overall research on body satisfaction with men is limited and body satisfaction research with Black men is very sparse. This literature review showed the importance of including Black men in body satisfaction research.

Descriptions for each measure used in this study were outlined in Chapter 3. These included, but were not be limited to, studies assessing validity, reliability, and alpha levels associated with the measures used in this study.

# Chapter 3: Research Method

## Introduction

The purpose of this study was to quantitatively examine differences in the tripartite influence model (e.g., media, family, and peers), internalization of cultural appearance standards, and drives for muscularity associated with body satisfaction between Black and White heterosexual college-age men. Additionally, this study allowed me to determine whether heterosexual Black college-aged men had similar body satisfaction experiences as White college-aged men.

The results from this study could be helpful in creating and guiding theoretical descriptions of differences in body satisfaction between Black and White heterosexual men. In addition, results from this study could be helpful in creating interventions to mitigate influences associated with heterosexual men's body satisfaction concerns. I also expanded the tripartite influence model by including race as a moderating variable associated with heterosexual men's body satisfaction.

In this chapter, I discuss the research design and rationale, methodology, and threats to validity, ending with a chapter summary.

## Research Design and Rationale

The study was a quantitative design using online surveys to gather data from Black and White heterosexual male students from a public community college in a large Southern city. I examined differences in body satisfaction between the men in the study using the Body Esteem Scale for Adolescents and Adults Appearance Satisfaction subscale (Mendelson, White, & Mendelson, 1997); Body Esteem Scale for Adolescents

and Adults Weight Satisfaction subscale (Mendelson et al., 1997); Body Esteem Scale for Adolescents and Adults Attribution subscale (Mendelson et al., 1997); and Ideal–Actual discrepancy score on the Winitch Men's Figure Drawing Scale (Lynch & Zellner, 1999; Winitch, 1993). In addition, I determined whether there were significant differences between the men in this study on the predictors of body satisfaction (e.g., the Internalization—General subscale of the Sociocultural Attitudes Toward Appearance Questionnaire [Int-Gen; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004], the Perceived Social Pressures Scale [PSPS; Stice, 2001] as modified by Forbes & Jung [2014], and the Drive for Muscularity Scale [DMS; McCreary, Sasse, Saucier, & Dorsch, 2004]). I also conducted moderate regressions to determine whether race (grouping variable) moderated the relations between selected aspects of body satisfaction and the predictors among the men in this study. Individual *t* tests for independent groups with sequential Bonferroni corrections were used to compare groups on mean scores of body satisfaction measures and predictor measures among the men in the study.

This study had approximately 62 items including the demographics. With this research study, I filled gaps in the body satisfaction literature by determining whether Black heterosexual men experienced body satisfaction, internalization of cultural appearance standards, and drives for muscularity similar to White heterosexual men, by determining how Black and White heterosexual men differed in their levels of body satisfaction; media, family, and peer influences; internalization of cultural appearance standards; and drives for muscularity, as well as by determining differences in the strength of the relations between the measures of body satisfaction and predictor

variables between the men in the study. I provide detailed descriptions of how hypotheses were tested in the analysis section.

## Rationale for Study

I had no knowledge of any large-scale studies that specifically investigated differences in body satisfaction; media, family, and peer influences; internalization of cultural appearance standards; and/or drives for muscularity between Black and White heterosexual men. By understanding body satisfaction differences between Black and White heterosexual college-aged men, I sought to expand on what is already known about men's body satisfaction, and, specifically, expand the limited knowledge of Black men's body satisfaction experiences. In addition, this study filled gaps in knowledge on differences in the degree of men's body satisfaction and differences in media, family, and peer influences, internalization of cultural standard appearance standards, and drives for muscularity between Black and White heterosexual college-age men.

## Methodology

### Participants

The participants were a convenience sample of Black and White heterosexual college-age men between the ages of 18 and 29 who attended a public community college in a large Southern city. I used this age range because body image issues are more prevalent among this age group than in older adult age ranges for men (Murray & Lewis, 2014). The community college is the second largest higher education institution in the state of Louisiana, with 18,000 students enrolled (Louisiana Board of Regents, 2014).

**Sampling/Recruitment and Data Collection Procedures**

Approval was granted by both the Walden IRB (#09-15-14-0099349) and the Community College IRB. Following these approvals, 4,204 ($n$ = 2202 Black and $n$ = 2,002 White) potential participants were solicited via email. The email included a solicitation letter (Appendix A), informed consent, and a link that directed participants to the study hosted by Survey Monkey. As soon as participants clicked on this link, the study measures were presented. These measures included a demographic questionnaire (Appendix C), the Body-Esteem Scale for Adolescents and Adults (BESAA; Appendix J), the Winitch Male Figure Drawing Scale (Appendix M), the Internalization—General subscale of the Sociocultural Attitudes Towards Appearance Scale (SATAQ-3; Appendix O), the Perceived Sociocultural Pressure Scale (PSPS; Appendix N), and the Drive for Muscularity Scale (DMS; Appendix E). I received permission to use all instruments. Permission emails are included in the appendixes.

The demographic questionnaire was presented first. Study measures were then randomly presented. Participants worked their way through screens containing no more than about 10 items. The rationale for using 10 items per screen was to avoid the need for participants to scroll down to the bottom of the page. All measures ran automatically until the last page. At that point, there was a message (Appendix Q) thanking participants for their participation and contribution to the study. There was a print box containing only my email so that participants, if they wished, could contact me to ask for the results of the study.

**Sampling frame (inclusion and exclusion criteria**). In order to participate in this study, participants needed to have current registration at the college where recruiting took place. Each participant was either a Black or White man between the ages of 18 and 29. Participants needed to have indicated that they were heterosexual and had to have access to the Internet. Past students whose registration records indicated that they had registered for a class taught by me were not excluded from receiving solicitation emails. However, current students of mine were excluded from receiving solicitation emails. Emails thanked the men who completed the study. One reminder email was sent to potential participants 2 weeks after the study launched. Respondents who did not indicate race, gender, and/or sexual orientation were excluded from the study. Respondents who indicated that they were homosexual and/or female were also excluded from the study.

**Power analysis**. I used a regression analysis with four continuous predictor variables (perceived social pressures, internalization, DMS-behavior, and DMS-attitude) and one dichotomous predictor variable (race). A sample size of 400 participants was used to achieve a power of .80, with median effect observed sizes (Aguinis et al., 2001; Aguinis et al., 2005). This sample size was based on the multiple regression (MMR) equation (Aguinis et al., 2005).

**Measures and operationalization of constructs**. Body satisfaction is very complicated. I used four body satisfaction measures (Appearance, Weight, Attribution, and WMFDS) and four predictor measures (PSPS, Internalization, DMS-behavior, and DMS-attitude) in this study. The Roberts et al. (2006) meta-analysis found that the size and differences in body satisfaction depend on the type of measure used. In addition,

Jung and Forbes (2014) used multiple measures to examine differences in body satisfaction and found differences in body satisfaction between Black and White adolescent boys on some measures but not on others.

Total estimated time to complete all data collection instruments was 15 minutes. I included the estimated time for each of the data collection instruments.

**Demographics**. I created a questionnaire to obtain basic demographic information (see Appendix C). Participants were presented with the demographic questionnaire first. Estimated time to complete the questionnaire was 30 seconds.

Survey Monkey was programmed to randomize the presentation order of the following measures:

**Measures of body satisfaction/dissatisfaction.**

***Internalization—General subscale of The Sociocultural Attitudes Towards Appearance Scale (SATAQ-3)***. The Internalization—General subscale of the SATAQ-3 is a nine-item scale used to measure internalization of unrealistic body ideals as they are presented in the media (Thompson et al., 2004). Items are answered on a 5-point Likert scale, with responses ranging from *definitely disagree* (1) to *definitely agree* (5). Some examples are "I compare my body to the bodies of TV and movie stars" and "I compare my body to the bodies of people who appear in magazines." It was scored by summing the items and computing the mean. Higher scores indicated greater media influences on attitudes, social pressures, and body satisfaction (Bedford & Johnson, 2006).

***Body-Esteem Scale for Adolescents and Adults (BESAA).*** Mendelson, White, and Mendelson (1997) created the 23-item Body-Esteem Scale. The BESAA assesses people's perceptions of what other people think of them. The BESAA includes three factor analytically derived subscales of different aspects of body attitudes. These subscales are BE-Appearance, which measures generalized attitudes about appearances; BE-Weight, which measures satisfaction regarding body weight; and BE-Attribution, which measures the participant's perception of how other people perceive his body. An example item on the BE-Appearance subscale is "I like what I look like in pictures.". An example item on the BE-Weight subscale is "I am satisfied with my weight," An example item on the BE-Attribution subscale is "other people consider me good looking."

The BE-Appearance subscale consists of 10 items (1, 6, 7, 9, 11, 13, 15, 17, 21, and 23). This subscale was used to determine differences in attitudes toward appearances between Black and White heterosexual college-aged men. The BE-Weight subscale includes eight items (3, 4, 8, 16, 18, 19, and 22). This subscale was used to determine differences in attitude in weight satisfaction between Black and White college-age men. The BE-Attribution subscale includes five items (2, 5, 12, 14, and 20). The following items were reverse scored: reflect negative attitudes about weight and appearance: 11, 7, 9, 13, 17, 21, 19, 4, and 18. Scoring occurred on a 5-point Likert scale anchored by *never* (0) and *always* (4). The BESAA was scored by summing the circled responses and computing the mean. Mendelson, White, and Mendelson (1997) reported coefficient alphas: BE-Appearance = .92; BE-Weight = .94; and BE-Attribution = .81. Mendelson,

Mendelson, and White (2001) reported subscale alphas for men: BE-Appearance for men = .89; BE-Weight for men = .87; BE-Attribution for men = .81.

Estimated time to complete this scale was 5 ½ minutes.

***Winitch Male Figure Drawing Scale (WMFDS).*** The Winitch Male Figure Drawing Scale included nine male silhouettes ranging from very little muscularity to extreme muscularity (Lynch & Zellner, 1999; Winitch, 1993). Each figure was numbered and arranged in order of muscularity. There were three questions about the figures. These questions were (a) "What is the number of the figure that most closely represents your body?" (b) "What is the number of figure that represents the body that you would like to have?" and (c) "Which figure do you think women will find most attractive?" Body (muscular) satisfaction discrepancy scores were computed by subtracting the number of the figure the participant indicated as representing his actual body from the number of the figure representing his desired (ideal) body. I used these discrepancy scores to determine differences in satisfaction with levels of body (muscular) satisfaction between Black and White heterosexual college-aged men. Positive scores indicated the degree of dissatisfaction with muscularity. These positive scores did not indicate the number (%) of the men who were dissatisfied with their bodies. These scores indicated only the number of men who wanted a larger, more muscular body.

The estimated time to complete this scale was 1 minute.

**Predictor measures.** Thompson et al. (2004) reported internal reliability (.96) and internal consistency (.90) for the Internalization—General subscale. Bedford and Johnson (2006) also reported reliabilities of the subscale of .96. This indicated good internal consistency.

The estimated time to compete this measure was 2 minutes.

***Perceived Sociocultural Pressure Scale (PSPS).*** The PSPS is an 8-item rating scale that measures perceived pressures people have from parents, friends, dates and the media to be thin and to lose weight (Stice, 2001; Stice et al., 1996). Items on the PSPS were answered on a 5-point Likert scale (1 = "*never*"; 2 = "*rarely*"; 3 = "*sometimes*"; 4 = "*often*"; 5 = "*always*"). The PSPS was scored by summing the circled responses and computing the mean. Four subscales measured influences from media, parents, friends, and dates.

The PSPS was initially designed for use with women and constructed to measure perceived pressures to be thin or lose weight (Stice et al., 1996). However, the PSPS was modified to measure perceived pressures to be muscular and strong for use with boys and men. For instance, Forbes and Jung (2008) modified the PSPS by changing Item 1 from "I've felt pressure from my friends to lose weight" to "I've felt pressure from my friends to be more muscular." I used Forbes and Jung's (2014) modified version in the study. Test-rest reliability: $r$ = .93 and coefficient alpha =.88 (Stice & Bearman, 2001; Stice & Whitenton, 2002). Forbes and Jung (2008) reported a coefficient alpha of .86 for adolescent boys.

The estimated time to complete this measure was 2 minutes.

***The Drive for Muscularity Scale (DMS)***. McCreary and Sasse (2000) created the original 15-item Drive for Muscularity Scale to assess a person's perceptions about his body and desire to be more muscular. McCreary, Sasse, Saucier, and Dorsch (2004) revised the original DMS and omitted Item 10 (steroid use). The scale consisted of two subscales: a behavior scale and an attitudes scale. Items on the DMS are answered on the following Likert scale: 1 = "*always*", 2 = "*very often*", 3 = "*often*", 4 = "*sometimes*", 5 = "*rarely*", and 6 = "*never*". Examples of items on the DMS are "I wish I were more muscular" and "I lift weights to build more muscle."

The behavior subscale is composed of Items 2, 3, 4, 5, 6, 8, 10, and 12. The attitude subscale is composed of Items 1, 7, 9, 11, 13, 14, and 15. Scores were reversed so that higher scores indicated higher drives for muscularity (McCreary, Saucier, & Courtenay, 2005). Alpha reliability estimates for the DMS have ranged from .85 to .91 (McCreary, 2007; McCreary, Saucier, & Courtney, 2005). Seven- to 10-day test-retest correlations reported for men were .93 for men on the entire scale, .96 for muscularity behaviors, and .84 for muscularity attitudes (Cafri & Thompson, 2007). Shomaker and Furman (2010) reported internal consistency of .75 for the scales. The original Item 10 assessed steroid use. Item 10 was deleted from the original scale (McCreary, Sasse, Saucier, & Dorsch, 2004). I used McCreary et al. (2004) version of the DMS in my study. This version of the DMS avoided asking participants to acknowledge their use of illegal drugs. I scored each subscale separately and made separate predictions for each subscale.

The estimated time to complete this measure was 4 minutes.

**Data analysis**. I used descriptive statistics to summarize data, a combination of t-tests with sequential Bonferroni corrections, and a series of moderated regressions. The order of the analyses is described below. All analyses used the current version of the IBM Software Statistical Package for the Social Sciences (IBM: SPSS, 2014).

**Research Questions and Hypotheses**

**Research Question 1.** Are there differences in selected aspects of body satisfaction between Black and White heterosexual college-aged men as measured by the following scales: Appearance = Body Esteem Scale for Adolescents and Adults Appearance Satisfaction subscale (Mendelson, White, & Mendelson, 1997); Weight = Body Esteem Scale for Adolescents and Adults Weight Satisfaction subscale (Mendelson et al., 1997); Attribution = Body Esteem Scale for Adolescents and Adults Attribution subscale (Mendelson et al., 1997); WMFDS = Ideal - Actual discrepancy score on the Winitch Men's Figure Drawing Scale (Lynch & Zellner, 1999; Winitch, 1993)?

$H1_0$: There are no differences between Black and White heterosexual college-aged men in appearance satisfaction as measured by the Appearance subscale.

$H1_A$: There are differences between Black and White heterosexual college-aged men in appearance satisfaction as measured by the Appearance subscale.

$H2_0$: There are no differences between Black and White heterosexual college-aged men in weight satisfaction as measured by the Weight subscale.

$H2_A$: There are differences between Black and White heterosexual college-aged men in weight satisfaction as measured by the Weight subscale.

$H3_0$: There are no differences between Black and White heterosexual college-aged men in attribution as measured by the Attribution subscale.

$H3_A$: There are differences between Black and White heterosexual college-aged men in attribution as measured by the Attribution subscale.

$H4_0$: There are no differences between Black and White heterosexual college-aged men in their levels of muscular satisfaction as measured by the WMFDS.

$H4_A$: There are differences between Black and White heterosexual college-aged men in their levels of muscular satisfaction as measured by the WMFDS.

**Research Question 2.** Are there significant differences between Black and White heterosexual college-aged men on the following predictors measures: Internalization = Internalization-General subscale of the Sociocultural Attitudes Toward Appearance Scale-3rd Edition (Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004); PSPS = Perceived Social Pressures Scale (Stice & Bearman, 2001; modified Forbes & Jung, 2014); DMS-Attitude = Drive for Muscularity Attitude subscale (McCreary, Sasse, Saucier, & Dorsch, 2004); DMS-Behavior = Drive for Muscularity Behavior subscale (McCreary et al., 2004)?

$H5_0$: There are no significant differences between Black and White heterosexual college-aged men in internalization of cultural appearance standards as measured by the Internalization scale.

$H5_A$: There are significant differences between Black and White heterosexual college-aged men in internalization of cultural appearance standards as measured by the Internalization subscale.

$H6_0$: There are no significant differences between Black and White heterosexual college-aged men in perceived social pressures as measured by the PSPS.

$H6_A$: There are significant differences between Black and White heterosexual college-aged men in perceived social pressures as measured by the PSPS.

$H7_0$: There are no significant differences between Black and White heterosexual college-aged men in drives from muscularity as measured by the DMS-Behavior subscale.

$H7_A$: There are significant differences between Black and White heterosexual college-aged men in drives for muscularity as measured by the DMS-Behavior subscale.

$H8_0$: There are no significant differences between Black and White heterosexual college-aged men in drives from muscularity as measured by the DMS-Attitude subscale.

$H8_A$: There are significant differences between Black and White heterosexual college-aged men in drives for muscularity as measured by the DMS-Attitude subscale.

**Research Question 3**. Does race moderate the relations between each of the predictor measures and the measures of body satisfaction for Black and White heterosexual college-aged men?

Question three was analyzed using individual moderated regressions for each body satisfaction measure to determine whether race moderates relations between body satisfaction measures and predictors. Because I used multiple overlapping scales, multicollinearity was an issue. Multicollinearity is a potential problem that may occur in a regression analysis when there are high intercorrelations among predictor variables (Lin, 2008). The Variance Inflation Factor (VIF) for these regressions ranged from 1.01

to 3.71. These values were all below the level that would raise concern with possible collinearity (O'Brien, 2007). The dichotomous variable race was code was "0" for White.

**Moderated regression models:**

Model 1

Race (White = 0)

PSPS

Internalization

DMS-Behavior

DMS-Attitude

Model 2

Race (White = 0)

PSPS

Internalization

DMS-Behavior

DMS-Attitude

Race x PSPS

Race x Internalization

Race x DMS-Behavior

Race x DMS-Attitude

$H9_0$: Race does not moderate the relations between internalization and body satisfaction among Black and White heterosexual college-aged men.

$H9_A$: Race does moderate the relations between internalization and body satisfaction among Black and White heterosexual college-aged men.

$H10_0$: Race does not moderate the relations between perceived social pressures and body satisfaction among Black and White heterosexual college-aged men.

$H10_A$: Race does moderate the relations between perceived social pressures and body satisfaction among Black and White heterosexual college-aged men.

$H11_0$: Race does not moderate the relations between DMS-behavior satisfaction and body satisfaction among Black and White heterosexual college-aged men.

$H11_A$: Race does moderate the relations between DMS-behavior satisfaction and body satisfaction among Black and White heterosexual college-aged men.

$H12_0$: Race does not moderate the relations between DMS-attitude satisfaction and body satisfaction among Black and White heterosexual college-aged men.

$H12_A$: Race does moderate the relations between DMS-attitude satisfaction and body satisfaction among Black and White heterosexual college-aged men.

## Threats to Validity

Threats to validity included, but were not be limited to, the length of the study, race, gender, and sex orientation not reported by participants, participants' understanding of how to complete measurements, and participants not completing all or partially completing measurements. In addition, given that data was collected over the Internet, technical issues (e.g., computer freezes, inability to access links) could have threaten validity. Participants who did not complete the study could have introduced bias in the sample. Some participants could have had difficulty understanding the instructions.

Participants could have interpreted questions differently and/or answered questions randomly instead of reading the questions. Social desirability bias could have been a threat to validity in that participants could have not been honest with their responses.

Forbes and Jung (2014) modification of PSPS was intended for adolescents and its reliability and validity with adults was unknown. Similarly, the SATAQ-3 was developed with samples of White college women. Although face validity for college men was high, its validity with Black college men was unknown.

## Ethical Concerns and Protection of Participants

Approval to conduct my study was granted by both the Walden IRB (#09-15-14-0099349) and the community college IRB. The participants were Black and White college-aged men attending the community college. Participation was voluntary. Current students of mine did not receive solicitation to participate emails. Participants had the right to terminate their participation at any moment they chose. Refusal to participate and/or complete surveys did not affect their status at the community college or their grades. Careful consideration was given to participants' rights and privacy. Although the risks were very low, some participants may have experienced psychological distress by answering some of the questions. Participants were not asked to disclose their names, social security numbers, and/or student identification numbers. Only the researcher and committee members were privileged to participants' demographic data and responses to measurements.

I met with the contact person (s) at the local community college's research office to discuss and create/set-up recruitment parameters. I did not have access to the contact

information of the men who received solicitation emails. Therefore, I had no way of connecting participants' names and/or email addresses with their responses to the measures. The contact person (s) in the office of research at the local community college had access to contact information for potential participants. However, the contact person (s) did not have access to participant's responses to measurements. The community college has policies and procedures in place to protect participants' confidentiality when participating in research.

Given the study's online data collection method, data was collected through Survey Monkey. Survey Monkey used Security Sockets Layer (SSL) encryptions to protect data transmitted over the Internet site and had security mechanisms to mitigate data breaches. The SSL automatically turned on whenever participants accessed the survey site. In addition, I set up a web-link collector that allowed me to compile anonymous responses and blocked participants' emails and/or IP addresses from being tracked.

All data-collecting, analysis, and storage practices complied with participant protection compliance policies and procedures in accordance with IRB's at Walden University and the community college. Data was downloaded from the Survey Monkey website and stored on a password protected DVD. I am the only one with access to the DVD. The DVD will be kept in my files for at least five years. After five years, I will destroy the DVD.

## Summary

This chapter provided detailed descriptions of the research design and rationale, methodology, and treats to validity associated with this study. Specifically, I provided information regarding the type of research design, descriptions of participants, how those participants will be recruited, how data was collected, ethical concerns, and data analysis in this chapter. This chapter included explanations and rational for my study, the interactions and applicability of my chosen research designs, and methodology to my research questions and hypothesis. Study results are reported in Chapter 4.

# Chapter 4: Results

## Introduction

The purpose of this study was to quantitatively examine differences in body satisfaction; the role of media, family, and peer influences; internalization of cultural appearance standards; and drives for muscularity between Black and White heterosexual college men. Independent *t* tests were used to determine whether these two groups differed on four body satisfaction measures (i.e., BESAA-Appearance subscale [Appearance], BESAA-Weight subscale [Weight], BESAA-Attribution subscale [Attribution], WMFDS [muscular satisfaction]), and four predictor measures (i.e., Perceived Social Pressure Scale [PSPS], Internalization—G eneral subscale [Internalization], DMS-Behavior subscale, and DMS-Attitude subscale). In addition, regression analysis was used to determine whether race (dichotomous predictor variable) moderated relations between the body satisfaction measures and the predictor measures. This chapter includes descriptions of the participants and data analysis for the research questions I tested using the Statistical Package for the Social Sciences (SPSS; IBM, 2012).

The data analysis included four steps. In Step 1, descriptive data, means, and the intercorrelations among all variables for each of the measures were presented. In Step 2, differences in body satisfaction measures between Black and White heterosexual men were determined. In Step 3, differences in the predictor measures between Black and White heterosexual men were determined. In Step 4, regression analysis was used to determine whether the dichotomous predictor variable (race) moderated relations

between the four continuous predictors (independent variables) and the four body satisfaction measures (dependent variables).

## Data Collection

Participants were recruited from a community college in a large city in Louisiana. Email solicitation messages were sent to 4,204 ($n$ = 2,202 Black, $n$ = 2,002 White) male students between ages 18 and 29 who were not current students of mine. This message included descriptions of the study and informed consent. There was a link that directed participants to the study on Survey Monkey. The study launched on October 24, 2014 and closed December 5, 2014. The Walden IRB approval # is 09-15-14-0099349 and expires September 14, 2015.

## Data Analysis

Changes were made to the initial data analysis plan. Initially, in the proposal, the two subscales of the DMS were mentioned, but only analyzing the total DMS score (to obtain a single DMS score) was proposed. This was a mistake. During the data analysis, the DMS subscales were assessed separately to obtain scores for both subscales. The DMS-Behavior subscale assessed differences in behaviors (i.e., muscle building exercises), and the DMS-Attitude subscale assessed differences in attitudes regarding muscularity. Using separate scores from each of these subscales made it possible to examine differences in both aspects of muscularity for the two groups of men. Moreover, assessing both DMS subscales necessitated changes to the regression model, which initially proposed examining only the DMS total score in the interactions. After changes were made, both DMS subscale scores were used in the regression model, making it

possible to analyze interactions between race and both aspects of muscularity for the two groups of men. In addition, a chi-square analysis was computed to determine whether there were differences in body dissatisfaction, as measured by discrepancies in actual body sizes and ideal body sizes, between Black and White men. Discrepancy scores (levels) were obtained by subtracting the participants' actual body sizes from their ideal body sizes. The scores (levels) were then categorized as smaller (ideal body image), no change (happy with body image), and larger (actual body image). This was measured by the WMFDS.

**Descriptive Statistics**

A total of 427 students responded to the study, representing 10% of the target population. Fifteen (4%) respondents indicated that they were homosexual, and two respondents (.5%) indicated that they were female. These respondents were excluded from the study. Also, data from10 respondents (2%) were deleted because these respondents skipped too many of the items. There were 400 total participants ($n$ = 220 or 55% Black, $n$ = 180 or 45% White) used in the study. The mean age for all participants was 22 years old (Black, $M$ = 21.91, $SD$ = 3.12 and White, $M$ = 22.77, $SD$ = 3.48).

A substantial proportion of participants omitted one or more items from one or more measures. Group differences in the proportion of missing items were nearly identical (White = 24.5%; Black = 23.7%). Although statisticians disagree on how and when to replace or discard missing data, they do agree that most missing data are missing at random (Arndt, 2009; Peugh & Enders, 2004; Wood et al., 2004). Scalewise deletion is a common approach for managing missing data (Arndt, 2009; Peugh & Enders, 2004;

Wood et al., 2004). Missing data in this study were assumed to be missing at random. I chose this conservative approach by deleting data from scales where five or more items were omitted. Following the deletions, the sample size for Whites varied from 136 to 180, and the sample size for Blacks varied from 168 to 220. The scales were scored by computing the mean of the items completed on the scales.

**Internal Consistency Coefficients**

Among respondents, the BESAA Appearance subscale had a Cronbach's alpha of .92, the Weight subscale had a Cronbach's alpha of .89, and the Attribution subscale had a Cronbach's alpha of .93. These are consistent with previously reported values (Mendelson, Mendelson, & White, 2001; Mendelson, White, & Mendelson, 1997). The PSPS had a Cronbach's alpha of .90. This value is consistent with Stice and Whitenton's (2002) and Stice and Bearman's (2001) reported value of .88. The Internalization—General subscale had a Cronbach's alpha of .90. This score is consistent with the Thompson et al. (2004) reported alpha of .96. The DMS-Behavior subscale had a Cronbach's alpha of .88, and the DMS-Attitude subscale had a Cronbach's alpha of .71. This indicated good internal consistency and is consistent with previous total scale alpha reliabilities ranging from .85 to .91 (McCreary, 2007).

**Correlations Among All Measures**

A correlations matrix was computed for body satisfaction measures and predictor measures by race, as shown in Table 1.

Table 1

*Correlations Matrix for All Measures by Race*

| Measures | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Appearance | | .72** | .81** | .31** | .37** | -.26** | -.48** | -.14 |
| Weight Satisfaction | .56 | | .51** | .12 | .19* | -.33** | -.19* | .10 |
| Attribution | .79** | .43** | | .27** | .40** | -.22** | -.51** | -.05 |
| WMFDS | .40** | .14 | .25** | | .20** | .50 | .40** | .09 |
| PSPS | .31** | .23** | .31** | .44** | | .06 | -.42** | -.35** |
| Internalization | -.34** | -.13 | -.31** | -.20* | -.02 | | .03 | -.27** |
| DMS-Behavior | -.38** | -.18* | -.45** | -.50** | -.55** | .17* | | .54** |
| DMS-Attribution | -.17* | .06 | .01 | -.09 | -.33** | -.10 | .49** | |

*Note*. Correlations among the White respondents are above the diagonal, and correlations among the Black respondents are below the diagonal. Appearance = Body Esteem Scale for Adolescents and Adults Appearance Satisfaction subscale (Mendelson, White, & Mendelson, 1997); Weight = Body Esteem Scale for Adolescents and Adults Weight Satisfaction subscale (Mendelson et al., 1997); Attribution = Body Esteem Scale for Adolescents and Adults Attribution subscale (Mendelson et al., 1997); WMFDS = Ideal–Actual discrepancy score on the Winitch Men's Figure Drawing Scale (Lynch & Zellner, 1999; Winitch, 1993); PSPS = Perceived Social Pressures Scale (Stice & Bearman, 2001; modified Forbes & Jung, 2014); Internalization = Internalization—General subscale of the Sociocultural Attitudes Toward Appearance Scale, third edition (Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004); DMS-Attitude = Drive for Muscularity Attitude subscale (McCreary, Sasse, Saucier, & Dorsch, 2004); DMS-Behavior = Drive for Muscularity Behavior subscale (McCreary et al., 2004).
*$p \leq .05$. ** $p \leq .01$.

There were no specific hypotheses made for these correlations. However, it should be noted that in most cases, there are small to moderate correlations among the body satisfaction measures. These results suggest that, as expected, they are measuring somewhat different aspects of the same complex, global construct of body satisfaction. The same is true for the small to moderate correlations among the predictors.

**Differences in Body Satisfaction Measures**

Independent group *t* tests were computed between the Black and White groups on each of the four measures of body satisfaction. Holm's (1979) sequential Bonferroni tests were used to maintain a family wise alpha of .05 (family size = 4). For example, four comparisons (family size) were being made. Bonferroni corrections were computed by dividing the alpha by the family size (.05/4 = .0125). The remaining *p* levels were arranged in sequential order from the smallest to the largest (i.e., .05/3 = .0133; .05/2 = .025; .05/1 = .05). Statistical significance was determined whether the computed *p* values were equal to or less than the required *p* value (.05). In addition, Cohen's *d*, a measure of effect size, was computed for these measures. Cohen (1992) suggested that an effect size of .20 indicates small differences, an effect size of .50 indicates medium relations, and an effect size of .80 indicates large relations between means. The means, standard deviations (SDs), Cohen's *d*, *t* test results, and significance levels are shown in Table 2.

Table 2

*Means, Standard Deviations, and Effect Sizes (d) for Body Satisfaction Measures by Race*

| Measures | Black | | | White | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *N* | Mean | *SD* | *N* | Mean | *SD* | *df* | *t* | *d* |
| Appearance | 168 | 28.80 | 5.11 | 136 | 26.97 | 6.12 | 302 | -2.90* | .31 |
| Weight Satisfaction | 190 | 29.51 | 4.89 | 160 | 27.68 | 6.02 | 348 | -3.13* | .30 |
| Attribution | 219 | 16.08 | 5.94 | 180 | 15.91 | 5.20 | 397 | .30 | .01 |
| WMFDS | 188 | -1.69 | 1.85 | 165 | 1.53 | 1.63 | 351 | .84 | .11 |

*Note*. Appearance= Body Esteem Scale for Adolescents and Adults Appearance Satisfaction subscale; Weight= Body Esteem Scale for Adolescents and Adults Weight Satisfaction; Attribution = Body Esteem Scale for Adolescents and Adults Attribution subscale; WMFDS = Ideal - Actual discrepancy score on the Winitch Men's Figure Drawing Scale.
*$p \leq .05$ using a sequential Bonferroni correction (Holm, 1979) to maintain an overall alpha of .05 (family size = 4).

Hypotheses one through four described differences on each of the measures of body satisfaction (i.e., Appearance, Weight, Attribution, and WMFDS). $H1_0$ for Appearance satisfaction and $H2_0$ for Weight satisfaction were rejected. The results indicated that the Black men who participated in the study were significantly more satisfied with their appearance and weight than the White men. The *d* of .31 for The Appearance satisfaction and .30 for Weight satisfaction indicated these were small differences. $H3_0$ for Attribution and $H4_0$ for WMFDS could not be rejected, indicating Black and White men did not differ in attribution or in their levels of muscular satisfaction.

A Chi Square was computed to determine whether differences existed in levels of dissatisfaction with muscularity as measured by the WMFDS. Body dissatisfaction

scores on the WMFDS were computed by subtracting the number of the figure representing the participants' actual body from the number of the figure representing their ideal body. A negative difference indicated a desire for a smaller (less muscular) body, a positive score indicated a desire for a larger (more muscular) body, and a difference of zero indicated satisfaction with their level of body muscularity. The results, shown in Table 3, did not approach significance, $X^2$ (2, N=353= .02, $p$ = 0.99). These results indicated that the desire for change in body size was not related to race. Instead, approximately one percent (1%) of either group wanted to be less muscular, 24% did not want to change their level of muscularity, and 75% wanted larger more muscular bodies.

Table 3

*Desire for Change in Body Size (Muscularity) by Race as Measured by the WMFDS*

| Desired body size | | | | | | |
|---|---|---|---|---|---|---|
| | Smaller | | No change | | Larger | |
| Group | % | *n* | % | *N* | % | *n* |
| White | 1.2 | 2 | 24.2 | 40 | 74.5 | 123 |
| Black | 1.1 | 2 | 23.9 | 45 | 75.0 | 141 |

*Note.* $X^2$ ($N$, 353) = .0229, $p$ = 0.99.

**Differences in Predictor Measures**

Independent group *t* tests were computed between the Black and White groups on each of the predictor measures. Holm's (1970) sequential Bonferroni tests were used to maintain a family wise alpha of .05 (family size = 4). The means, standard deviations (SDs), Cohen's *d*, *t* test results, and significance levels are shown in Table 4.

Table 4

*Means, Standard Deviations, and Effect Sizes (d) for Predictor Measures by Race*

| Measures | Black | | | White | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *N* | Mean | SD | N | Mean | SD | df | t | d |
| PSPS | 220 | 21.08 | 8.20 | 180 | 22 | 8.00 | 398 | 1.11 | .12 |
| Internalization | 163 | 25.00 | 8.23 | 144 | 24 | 9.30 | 305 | -1.30 | .11 |
| DMS-Behavior | 220 | 31.14 | 8.42 | 180 | 30 | 8.86 | 398 | 1.30 | .13 |
| DMS- Attitude | 219 | 23.42 | 5.69 | 178 | 24 | 6.49 | 395 | .60 | .09 |

*Note*. PSPS = Perceived Social Pressures Scale; Internalization = Internalization-General subscale of the Sociocultural Attitudes Toward Appearance Scale-3rd Edition; DMS-Attitude = Drive for Muscularity Attitude subscale; DMS-Behavior = Drive for Muscularity Behavior subscale.
*$p \leq .05$ using a sequential Bonferoni correction (Holm, 1979).

The primary purpose of this analysis was to determine whether there were differences in predictors by testing hypotheses five through eight. $H5_0$ - $H8_0$ could not be rejected for any of the predictor measures. This indicated that there were no significant differences between the Black and White groups on any of these predictor measures.

**Regression Among All Measures**

In a series of four moderated hierarchical regressions, each of the four measures of body satisfaction were individually regressed on the predictors. The purpose of these regressions was to determine if race moderated the relations between the continuous predictors (independent variables) and measures of body satisfaction (dependent variables). The dichotomous predictor race was coded as “0” for White and "1" for Black. In order for the interactions to be interpretable, the continuous predictors were mean centered. The Variance Inflation Factor (VIF) for these regressions ranged from

1.01 to 4.40 and are presented in each of the regression tables. A VIF value of less than 10 is acceptable and was applied to this study (Myers, 1990). Thus, multicollinearity was not an issue as these values were all below the level that would raise concern with possible collinearity (O'Brien, 2007).

The first moderated hierarchical regression model constructed included the constant terms, the dichotomous predictor race, and the four continuous predictors (PSPS, Internalization, DMS-Behavior, and DMS-Attitude). The regressions in Model 1 replicated the results of the *t* tests reported in table 2. Because the first order interactions involving race were the direct test of moderation, other interactions were not of interest and were not included in the regression model. In model 2, the first order interactions involving the dichotomous predictor race were added to determine whether race moderated the relations between the continuous predictors and the measures of body satisfaction.

**Regression Analysis Tables**

Table 5

*Moderated Hierarchical Regression for the BESAA Appearance Satisfaction Subscale and Interactions Between Race and Predictors*

| | Unstandardized coefficients | | Standardized coefficients | | Semi- | |
|---|---|---|---|---|---|---|
| | B | Std. | β | t | Partial | VIF |
| Model Term | | Error | | | coefficients | |
| Model 1 | | | | | | |
| Constant | 26.296 | .500 | | 52.643*** | | |
| Race (White = 0) | 2.195 | .600 | .189 | 3.325*** | .188 | 1.017 |
| PSPS | .162 | .054 | .216 | 3.002*** | .170 | 1.618 |
| Internalization | -.184 | .040 | -.275 | -4.621*** | -.261 | 1.106 |
| DMS-Behavior | -.200 | .051 | -.315 | -3.914*** | -.221 | 2.027 |
| DMS-Attitude | .059 | .069 | .063 | .859 | .049 | 1.673 |
| Model 2 | | | | | | |
| Constant | 26.083 | .516 | | 50.590*** | | |
| Race (White =0) | 2.519 | .685 | .075 | 3.677** | .207 | 1.100 |
| PSPS | .231 | .077 | .308 | 3.011* | .170 | 3.290 |
| Internalization | -.161 | .056 | -.240 | -2.857 | -.161 | 2.220 |
| DMS-Behavior | -.263 | .070 | -.414 | -3.740*** | -.211 | 3.859 |
| DMS-Attitude | -.175 | .093 | .186 | 1.877 | .106 | 3.055 |
| Race X PSPS | -.114 | .108 | -.110 | -1.052 | -.059 | 3.458 |
| Race X Internalization | -.046 | .080 | -.048 | -.577 | -.033 | 2.201 |
| Race X DMS Behavior | .125 | .103 | .144 | 1.218 | .069 | 4.404 |
| Race X DMS Attitude | -.236 | .140 | .166 | -1.692 | -.095 | 3.013 |

*Note*. Model 1: $R^2 = .301$, $F$ (5, 219) = 18.84, $p < .001$. Adjusted $R^2 = .285$. Model 2: $R^2 = .288$, $F$ (4, 215) = 1.24. Adjusted $R^2 = .288$. Model 2 vs. Model 1: $\Delta R^2 = .003$. PSPS = Perceived Social Pressures Scale; Internalization = Internalization-General subscale of the Sociocultural Attitudes Toward Appearance Scale-3rd Edition; DMS-Attitude = Drive for Muscularity Attitude subscale; DMS-Behavior = Drive for Muscularity Behavior subscale.

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$.

The results of the two steps of the moderate hierarchical regression analysis for the ninth hypothesis that race does not moderate the relations between the predictor variables and Appearance satisfaction (dependent variable) are shown in Table 5. When race (dichotomous predictor), PSPS, Internalization, DMS-Behavior, and DMS-Attitude were included as continuous predictor variables, the regression model was significant, $F$ (5, 219) = 18.84, $p < .001$, and explained 30.1% of the variance in Appearance satisfaction ($R^2 = .301$, $p < .001$), $p < .001$). It is known that the value of $R^2$ tends to overestimate the true percentage of population variance in the dependent variable that is explained by the independent variable (Keith, 2006). Therefore, the adjusted $R^2$ value of .285 or 28.5%, reported in Table 5, is a more accurate estimate of the variance in Appearance satisfaction that is associated with the continuous predicator variables.

When the interaction terms between race and the continuous predictor variables were added, the percentage of variance in Appearance satisfaction explained by the regression model was 31.7% ($R^2 = .317$). Hence the interaction terms accounted for an additional 1.6% of variance in the dependent variable ($\Delta R^2 = .016$). The joint significance of the four interactions was not statistically significant ($p = .294$) in the regression model. Thus, $H9_0$ of no moderating effects could not be rejected. The non-significant regression model implies that race does not moderation relations between the continuous variables and Appearance satisfaction, in terms of the regression slope, is not significantly different between the two groups of men.

Table 5 summarizes the two-step moderate hierarchical regression analysis of the Appearance Satisfaction subscale on the five predictor variables. Based on the statistics

in Table 5, it can be seen that the constant, $t$ (219) = 52.643, $p < .001$, PSPS ($t$ (219) = 3.002, $p = .003$ $p < .05$), Internalization ($t$ (219) = -4.621, $p < .001$), and DMS-Behavior ($t$ (219) = -3.914, $p < .001$) were significant predictors of Appearance satisfaction. Because race was a dichotomous variable, the results indicated that Black men had greater Appearance satisfaction than White men. The DMS-Attitude was not a significant predictor of Appearance satisfaction. The individual continuous predictor variables were examined further. Table 5 shows the semi-partial coefficients for each of the continuous predictor variables. The semi-partial coefficient for PSPS is .170; the square of this number is 0.029 or 2.9%, indicating that pressure to follow cultural appearance standards from media, family, and peers is uniquely associated with 2.9% of the variance in appearance satisfaction; after controlling for the variance of the other continuous predictor variables (Keith, 2006). The two other continuous predictor variables, based on the squared values of their semi-partial correlations, are associated with almost zero variance in appearance satisfaction.

The unstandardized moderate hierarchical regression $B$ of .162 for PSPS implies that a one unit increase in perceived social pressures score predicts a one unit increase in Appearance satisfaction score. The standardized moderate hierarchical regression $\beta$ of .216 for PSPS implies that an increase of Perceived Social Pressures score by one standard deviation predicts an increase in Appearance satisfaction score by one standard deviation. In terms of scoring each variable, increasing levels of internalization of cultural appearance standards and increasing muscle-building exercises were associated

with lower body satisfaction. In contrast, greater levels of perceived social pressures to achieve cultural appearance standards were associated with greater body satisfaction.

Table 6

*Moderated Hierarchical Regression for the BESAA Weight Satisfaction Subscale and Interactions Between Race and Predictors*

| | Unstandardized coefficients | | Standardized coefficients | | Semi- | |
|---|---|---|---|---|---|---|
| Model Term | B | Std. Error | β | t | partial coefficients | VIF |
| Model 1 | | | | | | |
| Constant | 26.744 | .478 | | 55.981*** | | |
| Race (White = 0) | 2.670 | .654 | .233 | 4.082*** | .231 | 1.020 |
| PSPS | .153 | .052 | .208 | 2.929** | .165 | 1.579 |
| Internalization | -.137 | .039 | -.205 | -3.469*** | -.196 | 1.097 |
| DMS-Behavior | -.130 | .052 | -.197 | -2.501*** | -.141 | 1.948 |
| DMS-Attitude | .215 | .066 | .230 | 3.254** | .184 | 1.573 |
| Model 2 | | | | | | |
| Constant | 26.536 | .482 | .250 | 55.006*** | | |
| Race (White =0) | 2.868 | .656 | .265 | 4.373*** | .246 | 1.037 |
| PSPS | .195 | .073 | -.309 | 2.683** | .151 | 3.094 |
| Internalization | -.206 | .054 | -.268 | -3.821** | -.215 | 2.071 |
| DMS-Behavior | -.177 | .071 | .310 | -2.496*** | -.140 | 3.662 |
| DMS-Attitude | .289 | .090 | -.075 | 3.205** | .180 | 2.962 |
| Race X PSPS | -.077 | .104 | .149 | -.773 | -.041 | 3.358 |
| Race X Internalization | .145 | .079 | .081 | 1.841 | .103 | 2.090 |
| Race X DMS Behavior | .076 | .105 | -.105 | .723 | .041 | 4.014 |
| Race X DMS Attitude | -.149 | .132 | .250 | -1.127 | -.063 | 2.760 |

*Note*. Model 1: $R^2$ = .180, $F$ (5, 257) = 11.30, $p$ < .001. Adjusted $R^2$ .164. Model 2: $R^2$ = .202, $F$ (4, 253) = 1.71. Adjusted $R^2$ .173. Model 2 vs. Model 1: $\Delta R^2$ = .022. PSPS = Perceived Social Pressures Scale; Internalization = Internalization-General subscale of the Sociocultural Attitudes toward Appearance Scale-3rd Edition; DMS-Attitude = Drive for Muscularity Attitude subscale; DMS-Behavior = Drive for Muscularity Behavior subscale.

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$.

The results of the two steps of the moderate hierarchical regression analysis for the tenth hypothesis that race does not moderate the relations between the continuous predictor variables and weight satisfaction (dependent variable) are shown in Table 6. When race (dichotomous predictor), PSPS, Internalization, DMS-Behavior, and DMS-Attitude were included as continuous predictor variables, the regression model was significant, $F$ (5, 257) = 11.30, $p < .001$, and explained 18.0% of the variance in weight satisfaction ($R^2 = .180$, $p < .001$). The adjusted $R^2$ value of .164 or 16.4%, reported in Table 6 is a more accurate estimate of the variance in weight satisfaction that is associated with the continuous predicator variables.

When the interaction terms between race and the continuous predictor variables were added, the percentage of variance in weight satisfaction explained by the regression model was 20.2% ($R^2 = .202$). Hence the interaction terms accounted for an additional 2.2% of variance in the dependent variable ($\Delta R^2 = .022$). The joint significance of the four interactions was not statistically significant in the regression model ($p = .148$) in the regression model. Thus, $H10_0$ of no moderating effects could not be rejected. The non-significant regression model implies that race does not moderation relations between the continuous variables and weight satisfaction, in terms of the regression slope, is not significantly different between the two groups of men.

Table 6 summarized the two-step moderate hierarchical regression analysis of the Weight Satisfaction subscale on the five-predictor variables. Based on the statistics in Table 6, it is can be seen that the constant, $t$ (257) = 55.981, $p < .001$, PSPS ($t$ (257) = 2.929, $p = .004$ $p < .05$), Internalization ($t$ (257) = -3.469, $p = .001$, $p < .05$), and DMS-

Attitude ($t$ (257) = -2.501, $p$ = .001, $p$ < .05) were significant predictors of weight satisfaction. Because race was a dichotomous variable, the results indicated that Black men had significantly greater weight satisfaction than White men. The DMS-Behavior subscale was not a significant predictor of weight satisfaction.

The individual continuous predictor variables were examined further. Table 6 shows the semi-partial coefficients for each of the continuous predictor variables. The semi-partial coefficient for DMS-Attitude is .184; the square of this number is 0.033 or 3.3%, indicating that Muscular Attitudes is uniquely associated with 3.3% of the variance in weight satisfaction; after controlling for the variance of the other continuous predictor variables (Keith, 2006). The semi-partial coefficient for PSPS is .165; the square of this number is 0.027 or 2.7%, indicating that Pressure to Follow Cultural Appearance Standards from media, family, and peers is uniquely associated with 2.7% of the variance in weight satisfaction; after controlling for the variance of the other continuous predictor variables (Keith, 2006). The continuous predictor variable, Internalization, based on the squared values of its semi-partial correlations, is associated with almost zero variance in weight satisfaction.

The unstandardized moderate hierarchical regression $B$ of .215 for DMS-Attitude implies that a one unit increase in Muscular Attitudes score predicts a one unit increase in weight satisfaction score. The standardized moderate hierarchical regression $\beta$ of .230 for DMS-Attitude implies that an increase of Muscular Attitude score by one standard deviation predicts an increase in weight satisfaction score by one standard deviation. The unstandardized moderate hierarchical regression $B$ of .153 for PSPS implies that a one

unit increase in Perceived Social Pressures score predicts a one unit increase in weight satisfaction score. The standardized moderate hierarchical regression $\beta$ of .208 for PSPS implies that an increase of Perceived Social Pressures score by one standard deviation predicts an increase in weight satisfaction score by one standard deviation. In terms of scoring each variable, increasing levels of Internalization of cultural appearance standards and increasing muscle-building exercises were associated with lower body satisfaction. In contrast, greater levels of perceived social pressures to achieve cultural appearance standards were associated with great body satisfaction.

Table 7

*Moderated Hierarchical Regression for the BESAA Attribution Subscale and Interactions Between Race and Predictors*

| | Unstandardized coefficients | | Standardized coefficients | | Semi- | |
|---|---|---|---|---|---|---|
| Model Term | B | Std. Error | β | t | Partial coefficients | VIF |
| Model 1 | | | | | | |
| Constant | 15.802 | .387 | | 40.828*** | | |
| Race (White = 0) | 1.001 | .533 | .088 | 1.877 | .087 | 1.018 |
| PSPS | .119 | .039 | .168 | 3.018* | .140 | 1.438 |
| Internalization | -.105 | .032 | -.163 | -3.322** | -.154 | 1.110 |
| DMS-Behavior | -.356 | .041 | -.546 | -8.754*** | -.407 | 1.804 |
| DMS-Attitude | .262 | .052 | .287 | 5.077*** | .236 | 1.486 |
| Model 2 | | | | | | |
| Constant | 15.800 | .390 | | 40.509*** | | |
| Race (White =0) | .991 | .535 | .087 | 1.853 | .086 | 1.019 |
| PSPS | .152 | .056 | .215 | 2.699 | .126 | 2.929 |
| Internalization | -.071 | .045 | -.111 | -1.603 | -.075 | 2.192 |
| DMS-Behavior | -.366 | .056 | -.562 | -6.496*** | -.303 | 3.454 |
| DMS-Attitude | .271 | .072 | .297 | 3.738*** | .174 | 2.905 |
| Race X PSPS | -.057 | .079 | -.059 | -.716 | -.033 | 3.155 |
| Race X Internalization | -.071 | .064 | -.076 | -1.118 | -.052 | 2.157 |
| Race X DMS Behavior | .022 | .082 | .024 | .274 | .013 | 3.673 |
| Race X DMS Attitude | -.001 | .104 | -.001 | -.008 | .000 | 2.638 |

*Note*. Model 1: $R^2$ = .372, $F$ (5, 291) = 34.49, $p$ < .001. Adjusted $R^2$ = .361. Model 2: $R^2$ = .378, $F$ (4, 287) = 19.34. Adjusted $R^2$ = .358. Model 2 vs. Model 1: $\Delta R^2$ = -.006. PSPS = Perceived Social Pressures Scale; Internalization = Internalization-General subscale of the Sociocultural Attitudes Toward Appearance Scale-3rd Edition; DMS-Attitude = Drive for Muscularity Attitude subscale; DMS-Behavior = Drive for Muscularity Behavior subscale.

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$.

The results of the two steps of the moderate hierarchical regression analysis for the eleventh hypothesis that race does not moderate the relations between the predictor variables and attribution (dependent variable) are shown in Table 7. When race (dichotomous predictor), PSPS, Internalization, DMS-Behavior, and DMS-Attitude were included as continuous predictor variables, the regression model was significant, $F$ (5, 291) = 34.49, $p < .001$, and explained 37.2% of the variance in attribution satisfaction ($R^2$ = .372, $p < .001$), $p < .001$). The adjusted $R^2$ value of .361 or 36.1%, reported in Table 7, is a more accurate estimate of the variance in attribution that is associated with the continuous predicator variables.

When the interaction terms between race and the continuous predictor variables were added, the percentage of variance in attribution explained by the regression model was 37.8% ($R^2$= .378). Hence the interaction term accounted for an additional 0.6% of variance in the dependent variable ($\Delta R^2$ = .006). The joint significance of the four interactions was not statistically significant ($p$ = .645) in the regression model. Thus, $H11_0$ of no moderating effects could not be rejected. The non-significant regression model implies that race does not moderation relations between the continuous variables and attribution, in terms of the regression slope, is not significantly different between the two groups of men.

Table 7 summarized the two-step moderate hierarchical regression analysis of the Attribution subscale on the five predictor variables. Based on the statistics in Table 7, it is can be seen that the constant ($t$ (291) = 40.828, $p < .001$), PSPS ($t$ (291) = 3.018, $p <$ .05), Internalization ($t$ (291) = -3.322, $p$ = .001, $p < .05$), DMS-Behavior ($t$ (291) = -

8.754, $p = .001$, $p < .05$), and DMS-Attitude ($t$ (291) = 5.077, $p < .001$) were significant predictors of attribution. The individual continuous predictor variables were examined further. Table 7 shows the semi-partial coefficients for each of the continuous predictor variables. The semi-partial coefficient for DMS-Attitude .236; the square of this number is 0.055 or 5.5%, indicating that muscular attitudes are uniquely associated with 5.5% of the variance in attribution, after controlling for the variance of the other continuous predictor variables (Keith, 2006). The semi-partial coefficient for PSPS is .087; the square of this number is 0.007 or 0.7%, indicating that pressure to follow cultural appearance standards from media, family, and peers is uniquely associated with 0.7% of the variance in attribution after controlling for the variance of the other continuous predictor variables (Keith, 2006). The two other continuous predictor variables, based on the squared values of their semi-partial correlations, are associated with almost zero variance in attribution.

The unstandardized moderate hierarchical regression *B* of .262 for DMS-Attitude implies that a one unit increase in muscular attitude score predicts a one unit increase in attribution score. The standardized moderate hierarchical regression $\beta$ of .287 for DMS-Attitude implies that an increase of muscular attitude score by one standard deviation predicts an increase in attribution score by one standard deviation. The unstandardized moderate hierarchical regression *B* of .119 for PSPS implies that a one unit increase in perceived social pressures score predicts a one unit increase in attribution score. The standardized moderate hierarchical regression $\beta$ of .168 for PSPS implies that an increase of perceived social pressures score by one standard deviation predicts an increase in

attribution score by one standard deviation. In terms of scoring each variable, increasing levels of Internalization of cultural appearance standards and increasing muscle building exercises were associated with lower body satisfaction. In contrast, greater levels of perceived social pressures to achieve cultural appearance standards were associated with great body satisfaction.

The results of the two steps of the moderate hierarchical regression analysis for the twelfth hypothesis that race does not moderate the relations between the predictor variables and muscular satisfaction (dependent variable) are shown in Table 8. When race (dichotomous predictor), PSPS, Internalization, DMS-Behavior, and DMS-Attitude were included as continuous predictor variables, the regression model was significant, $F$ (5, 256) = 21.50, and explained 29.6% of the variance in muscular satisfaction ($R^2$ = .296, $p$ < .001). The adjusted $R^2$ value of .282 or 28.2%, reported in Table 8, is a more accurate estimate of the variance in muscular satisfaction that is associated with the continuous predicator variables.

Table 8

*Moderated Hierarchical Regression for the WMFDS and Interactions Between Race and Predictors*

| | Unstandardized coefficients | | Standardized coefficients | | Semi- | |
|---|---|---|---|---|---|---|
| Model Term | B | Std. Error | β | t | partial coefficients | VIF |
| Model 1 | | | | | | |
| Constant | -1.641 | .137 | | -11.943*** | | |
| Race (White = 0) | -.165 | .189 | -.046 | -.876 | -.046 | 1.015 |
| PSPS | .039 | .015 | .173 | 2.693** | .141 | 1.493 |
| Internalization | -.015 | .011 | -.073 | -1.318 | -.069 | 1.101 |
| DMS-Behavior | -.102 | .014 | -.514 | -7.193*** | -.377 | 1.856 |
| DMS-Attitude | .083 | .019 | .291 | 4.426*** | .232 | 1.575 |
| Model 2 | | | | | | |
| Constant | -1.576 | .138 | | -11.411*** | | |
| Race (White =0) | -.237 | .189 | -.066 | -1.257 | -.065 | 1.032 |
| PSPS | .023 | .020 | .100 | 1.116 | .058 | 2.967 |
| Internalization | -.010 | .015 | -.049 | -.657 | -.034 | 2.050 |
| DMS-Behavior | -.076 | .019 | -.383 | -3.972*** | -.206 | 3.438 |
| DMS-Attitude | .046 | .025 | .161 | 1.837 | .095 | 2.831 |
| Race X PSPS | .029 | .029 | .092 | .981 | .051 | 3.247 |
| Race X Internalization | -.012 | .023 | -.038 | -.510 | -.027 | 2.034 |
| Race X DMS Behavior | -.050 | .028 | -.176 | -1.759 | -.091 | 3.720 |
| Race X DMS Attitude | .082 | .038 | .181 | 2.166* | .113 | 2.596 |

*Note.* Model 1: $R^2 = .296$, $F(5, 256) = 21.50$, $p < .001$. Adjusted $R^2 = .282$. Model 2: $R^2 = .319$, $F(4, 252) = 2.19$. Adjusted $R^2 = .295$. Model 2 vs. Model 1: $\Delta R^2 = .023$. PSPS = Perceived Social Pressures Scale; Internalization = Internalization-General subscale of the Sociocultural Attitudes Toward Appearance Scale-3rd Edition; DMS-Attitude = Drive for Muscularity Attitude subscale; DMS-Behavior = Drive for Muscularity Behavior subscale.

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$.

When the interaction terms between race (the dichotomous predictor variable) and the continuous predictor variables were added, the percentage of variance in muscular satisfaction explained by the regression model was 31.9% ($R^2$ = .319). Hence the interaction term accounted for an additional 1.3% of variance in the dependent variable ($\Delta R^2$ =.013). The interaction between race and the DMS-Attitude was statistically significant, $p$ = .031, $p$ < .05. However, the joint significance of the three other interactions was not statistically significant ($p$ = .071) in the regression model. Thus, the null hypothesis was not rejected. The non-significant interactions in the regression model implies that race (dichotomous predictor) does not moderate the relations between the continuous predictors and muscular satisfaction, in terms of the regression slope, is not significantly different between the two groups of men.

**Summary**

A correlation matrix showed small to moderate correlations among the body satisfaction measures and the predictors. Independent *t* tests tested hypotheses of racial differences on measures of body satisfaction (H1-4) and scores in predictors (H 5-8). The results indicated that Black men were significantly more satisfied with their appearance and their weight than were White men. However, the two groups did not differ on the Attribution and muscular satisfaction scales. In addition, Black and White men did not differ on the predictor measures. Hierarchical moderated regressions did not indicate that race moderated relations between predictors and measures of body satisfaction. However, Perceived Social Pressures; Internalization; and DMS-Behavior were found to be significant predictors for Appearance and Weight satisfaction. A

summary and interpretation of result findings, limitations, recommendations for further research, and implications for social change are discussed in Chapter 5.

# Chapter 5: Discussion, Conclusions, and Recommendations

## Introduction

This study was conducted in order to gain an understanding of how Black and White men differ in their experiences with selected aspects of body satisfaction (appearance, weight, attribution, and muscularity). Variables known to be associated with body satisfaction (media, family, and peer influences; internalization of cultural appearance standards; and drives for muscularity) were used as predictors in this study. In addition, this study determined whether race significantly moderated relations between predictors and body satisfaction. More specifically, I sought to determine whether Black men had similar experiences with selected aspects of body satisfaction and selected predictor as did White men.

This study used three theoretical frameworks (the tripartite influence model, sociocultural theory, and the social comparison theory) that were primarily developed based on research done with women. However, the results from this study suggest that these theories are applicable to both Black and White men. Relations between the predictors and the measures of body satisfaction were consistent with most theories of body dissatisfaction and have often been reported in the literature.

The remainder of the chapter includes summaries of the result findings, limitations associated with the study, recommendations based on findings, and implications for social change.

## Summary of the Findings

This study included 400 participants from a community college in a large city in Louisiana. This study found that, on two of four measures of body satisfaction, Black men had significantly greater body satisfaction than White men. This is similar to previous research findings that Black women have greater body satisfaction than White women (Grabe & Hyde, 2006; Roberts et al., 2006). In addition, regression analysis found that predictors accounted for significant amounts of variance in body satisfaction in 14 of 16 possible relations. Because these relations (with the exception of the ones for race) were not the focus of this study, no hypotheses were made for them. However, this finding is noteworthy because these predictors, with the exception of the DMS, were developed primarily for use with women and rarely used with Black males.

### Differences in Body Satisfaction Measures

The first statistical analysis explored differences on the four measures of body satisfaction. Independent *t* tests with sequential Bonferroni corrections to maintain a familywise alpha of .05 (family size = 4) were computed between the Black and White groups on each of the four measures of body satisfaction (Holm, 1979). Hypotheses 1 through 4 described differences on each of these measures of body satisfaction. However, $H1_0$ and $H2_0$ were the only two hypotheses rejected.

Hypothesis 1 examined differences in BESAA Appearance satisfaction, and Hypothesis 2 examined differences in BESAA Weight satisfaction between Black and White men. The results indicated that Black men were significantly more satisfied with their appearance and weight than were White men. Although differences on the

Appearance and Weight subscales were significant, the Cohen's *d* of .31 for appearance and .30 for weight indicated that these were small differences. However, these differences were larger than differences reported for Black and White women (Grabe & Hyde, 2006; Roberts et al., 2006).

As was noted in Chapter 2, in sharp contrast to research with girls and women, there have been relatively few studies of body satisfaction in Black men or boys and almost no comparisons of their level of body satisfaction to that of a comparison group. The only previous study using the BESAA to compare body satisfaction in Black and White samples was the Jung and Forbes (2014) study of middle school boys. Contrary to the present findings that Black men had greater body satisfaction than White men on the BESAA Appearance and Weight subscales, Jung and Forbes found no differences on these scales. However, Jung and Forbes did find that Black adolescent boys scored higher on the Attribution subscale than White boys did. In contrast, this study found no differences in BESAA Attribution subscale.

As with the study reported by Jung and Forbes, this study found significant differences in body satisfaction. However, it failed to replicate their specific findings. It is unclear whether differences between the current study of adult men and the Jung and Forbes study of middle school boys reflected generational and/or developmental differences, because both groups differed in both ways.

A chi square was conducted to determine whether differences existed in satisfaction with levels of muscularity, as measured by the discrepancy (i.e., desire to be more muscular) between the participants' actual and ideal bodies. The results indicated

that race did not factor into the participants' desire for change in levels of muscularity. Moreover, the results indicated that approximately 1% of either group wanted to be less muscular, and 24% did not want to change their level of muscularity, but 75% wanted larger and more muscles.

**Differences in Predictor Measures**

Independent group *t* tests, using sequential Bonferroni corrections to maintain a familywise alpha of .05 (family size = 4), were computed between the Black and White groups on each of the four predictor measures. Hypotheses 5 through 8 described differences on each of these predictors. However, no significant differences were found for any of the predictors. Similar results were reported by Steinfeldt et al. (2011) in their study of the DMS in Black and White college women athletes.

Although results from this study did not indicate differences on the predictor measures between Black and White men, it is important to note that all of the predictor measures were, in fact, robust predictors of body satisfaction. The DMS Behavior subscale significantly predicted levels of body satisfaction on all four measures, the PSPS and DMS Attitude subscale were significant predictors for three measures of body satisfaction, and the Internalization scale was a significant predictor for two measures of body satisfaction. Previous studies also found that the PSPS and DMS predicted levels of body satisfaction in men (Hardit & Hannum, 2012; Lawler & Nixon, 2011).

With the exception of the WMFDS, this study used very common predictors that have been validated in numerous studies. This suggests that some other unidentified variables (predictors and/or protective factors) produce greater body satisfaction in Black

men. This may or may not be the same as the protective factors often suggested to be present among Black women. Study results pose an important question: How does one explain that Black men have greater body satisfaction than White men, when no differences were found on the predictors between these two groups?

In summary, this study found that all of the predictor measures were robust predictors of body satisfaction, and no differences were found between Black and White men on any of the four predictor measures. The power analysis reported in Chapter 3 indicates that it is unlikely that the failure to find differences on these measures was the result of insufficient sample sizes or poor quality predictors.

**Regression Analysis for All Measures**

A moderated regression was computed on the measures of body satisfaction and each of the predictors. The variance inflation factor (VIF) was computed prior to the regression analysis. The VIF values ranged from 1.01 to 4.404. These low values suggest that it is unlikely that collinearity was a problem in the regressions (O'Brien, 2007). The primary purpose of the regression analyses was to determine whether race moderated relations between the predictors and selected measures of body satisfaction.

Hypotheses 9 through 12 described the relations between the four predictors and the four measures of body satisfaction. These hypotheses were tested with the race ***x*** predictor measures interactions. In general, the interactions were very small, and none of the interaction hypotheses (H9 through H12) were statistically significant. The failure to reject $H9_0$ through $H12_0$ indicated that there was no evidence that race influenced the relations between the measures of body satisfaction and the predictors.

Although there was no evidence of differences in predictor measures or that race moderated the relations between the predictors and the measures of body satisfaction, it is unlikely that failure to reject the null hypotheses regarding moderate effects can be attributed to problems with the predictor measures. This is because, as expected, all four predictor measures were robust predictors of body satisfaction. The DMS Behavior subscale significantly predicted levels of body satisfaction on all four measures. The PSPS and DMS Attitudes scale were significant predictors for three measures of body satisfaction and the Internalization scale was a significant predictor for two measures of body satisfaction. Given the effectiveness of these predictors, the most parsimonious explanation for the lack of differences on the measures or the lack of any evidence that race moderated the relations between the predictors and body satisfaction was that these differences were either extremely small or simply did not exist.

## Limitations of the Study

The obvious limitation is this was a correlational study, so caution is warranted regarding inference of cause-effect relationships. Moreover, random selection was not used, so the results might not generalize to similar samples. A number of factors limited the generalization of the results. This study was limited to participants from one higher education institution in one Southern city, who were Black and White men, aged 18 to 29 years, with internet access. Limiting this study to college students with internet access may have introduced both educational and socioeconomic biases. These limitations indicate that generalization of the study results to other samples should be done with appropriate caution. In addition, some participants may have had difficulty

understanding some of the items. As indicated in Chapter 1, the length of the study may have caused some participants to skip some of the items.

A substantial proportion of participants omitted one or more items from one or more measures. Consequently, the sample size for Whites varied from 136 to 180 and sample size for Blacks varied from 168 to 220. It is possible that missing data influenced the results. However, the proportion of each group with some missing data (25% of White sample and 24% of Black sample) was essentially equal, suggesting that missing data likely did not introduce any systematic bias.

This study was limited to measures used primarily with research conducted on women. These measures were limited to questionnaires and were self-reporting. It is possible the participants did not respond truthfully to some of the items. Inspection of the reliabilities found that my results with men were comparable to reliabilities reported in women. The one exception to this is the Winitch Male Figure Drawing Scale (Lynch & Zellner, 1999), which the reliability for men was not the same as the reliability for women.

In summary, this study was limited to understanding differences in body satisfaction using selected measures of body satisfaction and predictors. This research was limited to examining potential influences of body satisfaction and did not examine potential consequences of low body satisfaction such as eating disorders or steroid abuse. It is possible that there are racial differences associated with these consequences and there may be protective factors as well. Identifying potential consequences and

protective factors associated with racial and ethnic differences in body dissatisfaction among men are important topics for future research.

## Recommendations

This study was important because it is the only known study that examined Black men's attitudes about their bodies and used a White comparison sample. In fact, this is one of the few studies that have included a sizable sample of Black men. Among the many reasons why the study of Black men is important is that researchers have ethical obligations to; (a) study ethnic differences, and; (b) do research in ways that are sensitive and respective of ethnic differences (Council of National Psychological Associations for the Advancement of Ethnic Minority Interest [CNPAAEMI], 2000). In addition to being unethical, it is bad science to act as if research with one group is automatically applicable to all groups of people.

More studies should be conducted on heterosexual men in general and Black men, in particular, about their experiences with their bodies. This was a quantitative study concerned with differences in selected measures of body satisfaction and predictors associated with body satisfaction among Black and White men. Qualitative and/or mixed-methods studies should be conducted in this area, using the same selected measures, to give men the opportunity to tell about their body satisfaction experiences, and allow men to specifically identify variables that influence their body satisfaction.

Although this study found differences on two of the three BESAA subscales, future research should attempt to determine if these differences were attributed to other unidentified variables. Future research studies should examine differences on other sets

of predictors. Just because I did not find evidence that race moderated the relations between the predictors and the measures of body satisfaction, it should not be assumed that this is the final word on the matter. Researchers should not ignore the possibility that race may moderate relations between different sets of predictors and measures of body satisfaction.

Identifying protective factors has been an important topic for research among Black women. To my knowledge, this study is the first to show empirical evidence suggesting protective factors exist among Black men. These protective factors may or may not be the same as the ones often suggested to be present among Black women. Given this unknown, future research studies should attempt to identify protective factors associated with body satisfaction among Black men

In summary, this was a quantitative study that was limited to using questionnaires to gather data. Future studies should use different research methods, research designs, and measures to study body satisfaction among men.

## Implications for Social Change

When 75% of men have significant dissatisfaction with their bodies, there is an obvious social problem that needs to be addressed. The findings from this study indicate there is much work that has to be done to address body satisfaction among men, particularly Black men. The study clearly shows that, as is the case with women, if researchers look for differences in men's body satisfaction, some differences will be found. Body dissatisfaction among men in general, and Black men in particular, can no longer be dismissed as unimportant. Recent research showing a worrisome increase in

clinical eating disorders among men suggested that there is an urgent need for additional research (Raevori et al, 2014).

Additionally, study findings show that Black men are more satisfied with their bodies than White men; Black men experience the same kinds of body satisfaction influences that White men do; and Black and White men have similar predictors regarding body satisfaction. The fact that Black men have greater body satisfaction is very consistent with the literature suggesting that there are factors in Black culture that serve to reduce body dissatisfaction among Black women. The results suggest that similar phenomena may occur among Black men. Further research is needed to identify these factors. Moreover, the differences I found with men were approximately the same size as the differences found with women on similar measures. The results suggest that greater body satisfaction among Black men and women may be due to protective factors.

Identifying these protective factors is very important because once they are identified it may be possible to devise interventions that will provide similar protection for other populations. Given the enormity of the problems with body dissatisfaction, the need for more effective prophylaxis or interventions is both urgent and obvious.

In summary, one of the main social implications is that Black men are more satisfied with their bodies than White men. This may be surprising considering Black men are influenced by many of the same variables (i.e., pressures for family, friends and the opposite gender, and internalization of unrealistic cultural appearance standards) as White men. Given the study results, a logical argument is there is a crucial factor somewhere influencing differences in body satisfaction among these two groups of men.

That crucial factor is the protective factor. The study results suggest that differences in body satisfaction among these groups of men are unlikely due to social pressure; internalization of cultural appearance standards; and/or drives for muscularity. Researchers may have to look beyond traditional predictors of body satisfaction to find modern factors associated with body satisfaction among men.

Additionally, I found the percent of men who are dissatisfied with their level of muscularity did not differ between the groups. A social implication is all men cannot be treated the same. A clinical implication is clinicians could ask men if they have concerns with their bodies. Researchers and treatment providers cannot continue to be ethically insensitive by including only one group when attempting to understand the nuances of body satisfaction (Council of National Psychological Associations for the Advancement of Ethnic Minority Interest (CNPAAEMI, 2000). The results from this study could be helpful in creating and guiding theoretical descriptions of differences in body satisfaction between Black and White heterosexual men. Results from this study would help healthcare, treatment providers, and policymakers gain insight on how to promote culturally sensitive and specific guidelines for men experiencing issues with their bodies.

## Conclusion

In closing, we know a great deal about women's body satisfaction and there is a substantial amount of information on differences in body satisfaction between Black and White women. This study very clearly shows that, in terms of body satisfaction, Black men and White men are far more similar than they are different. However, this study indicated that, similar to comparisons between Black and White women, Black men have

greater body satisfaction, at least in terms of some measures, than White men. To my knowledge this is new information, it certainly is with the BESAA.

This research indicated that Black men and White men experience many of the same social pressures to conform to cultural appearance ideals, have similar levels of internalization of these ideals, and have similar attitudes about the importance of muscularity. Despite these striking similarities, on two of the four measures of body satisfaction, Black men had greater body satisfaction than White men. An important unanswered question is, why all of these similarities do not result in similar levels of body satisfaction? Future research should search for the answer to this question.

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Appendix A: Solicitation Email Message

**How important is physical attractiveness to you?**

There has been a great deal of interest in women's and gay men's opinions on the importance of physical attractiveness and how they feel about their bodies. However, there has been little interest in how heterosexual men between the ages of 18 and 29 feel about their bodies. You are invited to participate in a survey that will address this oversight.

This survey will ask questions about how important physical attractiveness is to you. Your participation may help researchers and society in general gain a better understanding of how important physical attractiveness is for 18-29 year old college men. The study is anonymous. You will not be asked to give your name or any identifying information. The survey will last about 34 minutes and will be completed online. Your participation is completely voluntary and you can stop participation any time.

This study is being done by Darrell Renfro, a doctoral candidate at Walden University who is also a psychology instructor at the community college. In order to protect your privacy, you will not be asked to put your name or any identifying information on the survey. The survey is completely anonymous.

To take this survey, please click on the following link to begin the study:

https://www.surveymonkey.com/s/DZ98Q9T

Thanks in advance for your time,

Darrell Renfro, LPC-S
Doctoral Student
Walden University

Appendix B: Consent Form

You are invited to participate in a research study of attitudes and opinions about the nature and importance of physical attractiveness. The researcher is inviting all heterosexual men, between the ages of 18 and 29, to be in this study. This age range was selected because younger people may have different attitudes about appearances than older people.

This study is being conducted by Darrell Renfro, a doctoral candidate at Walden University and a psychology instructor at the community college. But, this study is separate from my role as an instructor. This research project is under the guidance of Gordon Forbes, PhD, dissertation chair.

**Background:**

There has been a great deal of interest in women's and gay men's opinions on the importance of physical attractiveness and how they feel about their bodies. However, there has been little interest in how heterosexual men, between the ages of 18 and 29, feel about their bodies. The present survey will address this oversight. In order to do this, I need your help. The purpose of this study is to gain a better understanding how important physical attractiveness is to you.

**Procedures:**

The survey will be taken online.

The items you will respond to in the study seek to understand how important physical attractiveness is to you. Here are examples of some of the items:
I wish that I were more muscular.
I've felt pressure from my friends to be more muscular.
I like what I look like in pictures.

**Voluntary Nature of the Study:**

Your participation in the research study is **VOLUNTARY**. Your decision to participant or not will not affect your status at the college. If you choose to participate, you can discontinue/stop at any time without penalty.

Risks and Benefits of Being in the Study:
Although the risk is very low, it is possible that some participants may experience some psychological distress by answering some of the questions. You will not be asked to disclose any personal information. Participation in this study will not pose any risks to your health and well-being.

Results from this study may help society understand the importance of physical appearance among this generation of heterosexual men.

**Time:**
This study will take approximately 34 minutes to complete. Once you start, you will need to complete the study at one time. In order to maintain your anonymity, there is no way to track your responses. For this reason, you must take all of the survey at one time.

**Payment/compensation:**

There will be no compensation/payment (s) for participating in this study.

**Privacy:**

The study is anonymous. In order to protect your privacy, no signatures are being collected and completing this survey indicates your consent, if you choose to participate. You will not be asked personal information such as your name, social security number, date of birth, or student identification number. This is a dissertation research study for educational purposes. Data will be kept secure by a commercial survey and then securely protected by the researcher. After seven years, data will be destroyed.

**Contacts and Questions:**

If you have any questions, concerns, and/or comments at any time during your participation in the study, please do not hesitate to contact me. You can contact me via email at darrell.renfro@waldenu.edu at your convenience. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 3121210. Walden University's approval number for this study is IRB approval number: 09-15-14-0099349 and it expires on IRB expiration date: September 14, 2015.

Please print or save this consent form for your records.

**Statement of consent:**

I have read the above information and I feel I understand this study well enough to make a decision about my participation. I understand that my participation is voluntary and I can stop at any time I choose without penalty. By participating in this study, I am indicating my consent. Click this link to begin the survey. A begin survey link will be here:

Thanks in advance for your time and participation,

Darrell Renfro, LPC-S
Doctoral Student
Walden University

Appendix C: Demographic Questionnaire

The demographic questionnaire is intended to collect basic and general information pertinent to this study.

| | |
|---|---|
| What is your race?<br>_____White or European descent<br>_____ Black or African-American<br>_____ Other<br>What is your gender?<br>____ Male<br>____Female<br>____ Other<br>What is your age? _____ | What is your sexual orientation?<br>Heterosexual (straight) _____<br>Homosexual (gay) _____ |
| What is your height? | |
| What is your weight? | |

Appendix D: Approval to Use DMS

Subject : **Re: Drive for Muscularity Scale**
Date : Wed, Apr 24, 2013 11:10 PM CDT
From : Don McCreary <donmccreary@hotmail.com>
To : Darrell Renfro <darrell.renfro@waldenu.edu>

Darrell, thanks for the note, as well as for your interest in the DMS. Please feel free to use the scale in your research. The most recent summary of its reliability and validity is my chapter in Thompson & Cafri's 2007 book on the muscular ideal, though the scale has been used extensively since then.

Good luck and I look forward to reading more about your research in the future.
Don McCreary, PhD
Toronto, ON Canada

On 2013-04-24, at 8:30 PM, "Darrell Renfro" <darrell.renfro@waldenu.edu> wrote: Dr. McCreary,

I hope this email finds you doing well. My name is Darrell Renfro and I am a PhD student in psychology at Walden University. Dr. Gordon Forbes, PhD is my dissertation chair. I have a bachelor's degree in psychology and a Master's degree in community counseling. I am a Licensed Professional Counselor (LPC) and LPC-Supervisor in metro-New Orleans, LA. I am in private practice and I also teach psychology courses at a community college. My background and interests are in sociocultural influences on cognition, self-perceptions, and behavior. I am currently writing my dissertation proposal on racial differences, tripartite (media, family, and peer) influences, and a drive for muscularity among men. I am requesting approval to use one of your measures/instruments, Drive for Muscularity Scale, in my study. Your approval is much need and would be greatly appreciated. If you should have any questions, comments, concerns, and/or need additional information about my study, please feel free to contact me at your earliest convenience: darrell.renfro@Waldenu.edu.

Sincerely,

Darrell Renfro, LPC-S

Appendix E: The Drive for Muscularity Scale

(McCeary, Saucier, & Courtenay, 2005)

Please read each item carefully then, for each one, circle the number that best applies to you.

| **1**<br>**Always** | **2**<br>**Very often** | **3**<br>**Often** | **4**<br>**Sometimes** | **5**<br>**Rarely** | **6**<br>**Never** |
|---|---|---|---|---|---|

| | |
|---|---|
| 1. I wish that I were more muscular. | 1 2 3 4 5 6 |
| 2. I lift weights to build up muscle. | 1 2 3 4 5 6 |
| 3. I use protein or energy supplements. | 1 2 3 4 5 6 |
| 4. I drink weight gain or protein shakes. | 1 2 3 4 5 6 |
| 5. I try to consume as many calories as I can in a day. | 1 2 3 4 5 6 |
| 6. I feel guilty if I miss a weight training session. | 1 2 3 4 5 6 |
| 7. I think I would feel more confident if I had more muscle mass. | 1 2 3 4 5 6 |
| 8. Other people think I work out with weights too often. | 1 2 3 4 5 6 |
| 9. I think that I would look better if I gained 10 pounds in bulk. | 1 2 3 4 5 6 |
| 10. I think that I would feel stronger if I gained a little more muscle mass. | 1 2 3 4 5 6 |
| 11. I think that my weight training schedule interferes with other aspects of my life. | 1 2 3 4 5 6 |
| 12. I think that my arms are not muscular enough. | 1 2 3 4 5 6 |
| 13. I think that my chest is not muscular enough. | 1 2 3 4 5 6 |
| 14. I think that my legs are not muscular enough. | 1 2 3 4 5 6 |

Appendix F: Approval to Use PSPS

Subject : **Re: Perceived Social Pressure Scale**
Date : Thu, Apr 25, 2013 03:12 PM CDT
From : Eric Stice <estice@ori.org>
To : Darrell Renfro <darrell.renfro@waldenu.edu>

Hi Darrell,
We are always happy to share the measures we have developed with others. Hope they work well for you in your study. There is some potentially useful info at the following site: http://homepage.psy.utexas.edu/homepage/group/sticelab/scales/ I confirmed that the PSPS is on that site, but I don't see the Appearance Evaluation Scale. Is that just our simple measure of body dissatisfaction or something else? You might have to remind me what papers I used it in if you don't have the items.

Best wishes -Eric
On Apr 24, 2013, at 5:26 PM, Darrell Renfro wrote:

Dr. Stice,
I hope this email finds you doing well. My name is Darrell Renfro and I am a PhD student in psychology at Walden University. Dr. Gordon Forbes, PhD is my dissertation chair. I have a bachelor's degree in psychology and a Master's degree in community counseling. I am a Licensed Professional Counselor (LPC) and LPC-Supervisor in metro-New Orleans, LA. I am in private practice and I also teach psychology courses at a community college. My background and interests are in sociocultural influences on cognition, self-perceptions, and behavior. I am currently writing my dissertation proposal on racial differences, tripartite (media, family, and peer) influences, and a drive for muscularity among men. I am requesting approval to use two of your measures/instruments, Perceived Social Pressure Scale, in my study. Your approval is much need and would be greatly appreciated. If you should have any questions, comments, concerns, and/or need additional information about my study, please feel free to contact me at your earliest convenience:
darrell.renfro@Waldenu.edu<mailto:darrell.renfro@Waldenu.edu>,
Sincerely,

Darrell Renfro, LPC-S

Appendix G: Dr. Forbes's Approval to Use Modified PSPS

**Gordon B. Forbes Jr**. Apr 2

to me

Hello Darrell,
You have my permission to use the version of the Perceived Social Pressure Scale that has been modified for use with adolescent boys and men as it appears in Forbes, G. B. & Jung, J. (2014) *Measures Based on Sociocultural or Feminist Theory as Predictors of Body Dissatisfaction Among Korean and U.S. Middle School Boys and Girls* Manuscript submitted for publication
Best wished with your dissertation research.
Gordon B. Forbes, Ph.D.

On Wed, Apr 2, 2014 at 1:03 AM, Darrell Renfro <darrell.renfro@waldenu.edu> wrote:
Dr. Forbes,

I hope all is well. My name is Darrell Renfro and I am a PhD student in psychology at Walden University. Dr. Gordon Forbes, PhD is my dissertation chair. I have a bachelor's degree in psychology and a Master's degree in community counseling. I am a Licensed Professional Counselor (LPC) and LPC-Supervisor in metro-New Orleans, LA. I am in private practice and I also teach psychology courses at a community college. My interests are in sociocultural influences on cognition, self-perceptions, internalization, and behaviors. I am currently writing my dissertation proposal on racial differences, tripartite (media, family, and peer) influences, internalization regarding body satisfaction, and a drive for muscularity among men. I am requesting approval to use one of your modified versions of the Perceived Social Pressure Scale (Stice et al., 2006). Your approval is much need and would be greatly appreciated. If you should have any questions, comments, concerns, and/or need additional information about my study, please feel free to contact me at your earliest convenience.

Appendix H: Perceived Sociocultural Pressure Scale

(Stice & Bearman, 2001); modified (Forbes & Jung, 2014)

Please circle the response that best captures your own experience.

| **1**<br>**Never** | **2**<br>**Rarely** | **3**<br>**Sometimes** | **4**<br>**Often** | **5**<br>**Always** |
|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 1. I've felt pressure from my friends to be more muscular. | 1 | 2 | 3 | 4 | 5 |
| 2. I've noticed a strong message from my friends to have a strong body. | 1 | 2 | 3 | 4 | 5 |
| 3. I've felt pressure from my family to be more muscular. | 1 | 2 | 3 | 4 | 5 |
| 4. I've noticed a strong message from my family to have a strong body. | 1 | 2 | 3 | 4 | 5 |
| 5. I've felt pressure from women to be more muscular. | 1 | 2 | 3 | 4 | 5 |
| 6. I've noticed a strong message from women to have a strong body. | 1 | 2 | 3 | 4 | 5 |
| 7. I've felt pressure from the media (e.g., TV, magazines) to be more muscular. | 1 | 2 | 3 | 4 | 5 |
| 8. I've noticed a strong message from the media (e.g., TV, magazines) to have a strong body. | 1 | 2 | 3 | 4 | 5 |

Appendix I: Approval to Use BESAA

Subject : **BESAA**
Date : Wed, Apr 24, 2013 07:58 PM CDT
From : "Darrell Renfro" <darrell.renfro@waldenu.edu>
To : MORTON.MENDELSON@MCGILL.CA

Dr. Mendelson,

I hope this email finds you doing well. My name is Darrell Renfro and I am a PhD student in psychology at Walden University. Dr. Gordon Forbes, PhD is my dissertation chair. I have a bachelor's degree in psychology and a Master's degree in community counseling. I am a Licensed Professional Counselor (LPC) and LPC-Supervisor in metro-New Orleans, LA. I am in private practice and I also teach psychology courses at a community college. My background and interests are in sociocultural influences on cognition, self-perceptions, and behavior. I am currently writing my dissertation proposal on racial differences, tripartite (media, family, and peer) influences, and a drive for muscularity among men. I am requesting approval to use two of your measure/instrument, Body-Esteem Scale for Adolescents and Adults, in my study. Your approval is much need and would be greatly appreciated. If you should have any questions, comments, concerns, and/or need additional information about my study, please feel free to contact me at your earliest convenience: darrell.renfro@Waldenu.edu.

Sincerely,

Darrell Renfro, LPC-S
**From:** Beverley Mendelson <bev.mendelson@gmail.com>
**To:** dlrenfro
**Sent:** Wednesday, April 24, 2013 9:09 PM
**Subject:** Fwd: Body Esteem Scale

Hello,

Here are copies of the following:

a paper on the latest version of the Body Esteem Scale for Adolescents and Adults (bescale);

Thanks for your interest in our work.

BKM

P.S. Please address future e-mail to <bev.mendelson@gmail.com>.

# Appendix J: BESAA

(Mendelson, White, & Mendelson, 1997)

BESAA

| **0**<br>**Never** | **1**<br>**Seldom** | **2**<br>**Sometimes** | **3**<br>**Often** | **4**<br>**Always** |
|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. | I like what I look like in pictures. | 0 | 1 | 2 | 3 | 4 |
| 2. | Other people consider me good looking. | 0 | 1 | 2 | 3 | 4 |
| 3. | I'm proud of my body. | 0 | 1 | 2 | 3 | 4 |
| 4. | I am preoccupied with trying to change my body weight. | 0 | 1 | 2 | 3 | 4 |
| 5. | I think my appearance would help me get a job. | 0 | 1 | 2 | 3 | 4 |
| 6. | I like what I see when I look in the mirror. | 0 | 1 | 2 | 3 | 4 |
| 7. | There are lots of things I'd change about my looks if I could. | 0 | 1 | 2 | 3 | 4 |
| 8. | I am satisfied with my weight. | 0 | 1 | 2 | 3 | 4 |
| 9. | I wish I looked better. | 0 | 1 | 2 | 3 | 4 |
| 10. | I really like what I weigh. | 0 | 1 | 2 | 3 | 4 |
| 11. | I wish I looked like someone else. | 0 | 1 | 2 | 3 | 4 |
| 12. | People my own age like my looks. | 0 | 1 | 2 | 3 | 4 |
| 13. | My looks upset me. | 0 | 1 | 2 | 3 | 4 |
| 14. | I'm as nice looking as most people. | 0 | 1 | 2 | 3 | 4 |
| 15. | I'm pretty happy about the way I look. | 0 | 1 | 2 | 3 | 4 |
| 16. | I feel I weigh the right amount for my height. | 0 | 1 | 2 | 3 | 4 |
| 17. | I feel ashamed of how I look. | 0 | 1 | 2 | 3 | 4 |
| 18. | Weighing myself depresses me. | 0 | 1 | 2 | 3 | 4 |
| 19. | My weight makes me unhappy | 0 | 1 | 2 | 3 | 4 |
| 20. | My looks help me to get dates. | 0 | 1 | 2 | 3 | 4 |
| 21. | I worry about the way I look. | 0 | 1 | 2 | 3 | 4 |
| 22. | I think I have a good body. | 0 | 1 | 2 | 3 | 4 |
| 23. | I'm looking as nice as I'd like to. | 0 | 1 | 2 | 3 | 4 |

Appendix K: Permission to Use Winitch Male Figure Drawing Scale

On 5/1/2013 11:25 PM, Darrell Renfro wrote:

Dr. Zellner,

I hope this email finds you doing well. My name is Darrell Renfro and I am a PhD student in psychology at Walden University. Dr. Gordon Forbes, PhD is my dissertation chair. I have a bachelor's degree in psychology and a Master's degree in community counseling. I am a Licensed Professional Counselor (LPC) and LPC-Supervisor in metro-New Orleans, LA. I am in private practice and I also teach psychology courses at a community college. My background and interests are in sociocultural influences on cognition, self-perceptions, and behavior. I am currently writing my dissertation proposal on racial differences, tripartite (media, family, and peer) influences, and a drive for muscularity among men. I am requesting approval to use one of your measures/instruments, Winitch Figure Drawing Scale, in my study. Your approval is much need and would be greatly appreciated. If you should have any questions, comments, concerns, and/or need additional information about my study, please feel free to contact me at your earliest convenience: darrell.renfro@Waldenu.edu.

Sincere,

Darrell Renfro, LPC-S

Dear Mr. Renfro,

Please feel free to use it. You might have to get approval from the publisher of Sex Roles.

Debra Zellner

# Appendix L: Permission From Publisher to Use WMFDS

Panulla, Sharon, Springer US <Sharon.Panulla@springer.com> 9:19 AM (6 hours ago)

to me

Dear Darrell:

You can go ahead and use the scale, citing the publisher and other relevant information.

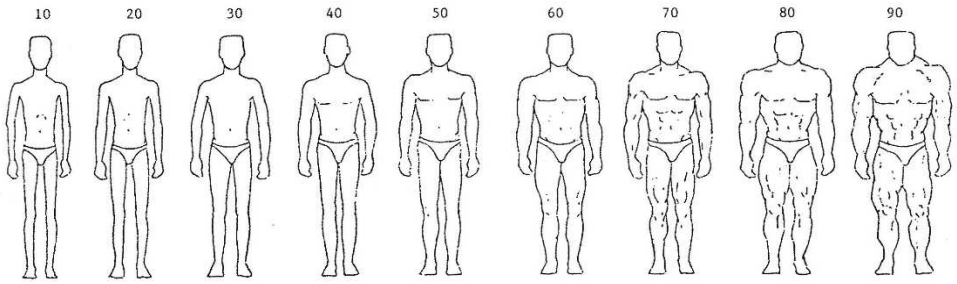
Best,

Sharon Panulla
Executive Editor
Springer-SBM
233 Spring Street
New York, NY 10013

Appendix M: Winitch Male Figure Drawing Scale

(Lynch & Zellner, 1999)

After viewing the figures, please answer the question below.




1. What is the number of the figure that most closely represents your body?

2. What is the number of figure that represents the body that you would like to have?

3. Which figure (number) do you think women will find most attractive?

Appendix N: Permission to Use SATAQ-3

Subject : Fw: SATAQ-3
Date : Fri, Nov 22, 2013 11:55 PM CST
From : Darrell Renfro
To : "darrell.renfro@waldenu.edu" <darrell.renfro@waldenu.edu>

On Friday, November 22, 2013 1:16 PM, "Thompson, J. Kevin" <jkthompson@usf.edu> wrote:
Sure, no problem.
Kevin

---

From: Darrell Renfro [dlrenfro@yahoo.com]
Sent: Wednesday, November 20, 2013 11:24 PM
To: Thompson, J. Kevin
Subject: SATAQ-3

Dr. Thompson,

I hope all is well. My name is Darrell Renfro and I am a PhD student in psychology at Walden University. Dr. Gordon Forbes, PhD is my dissertation chair. I have a bachelor's degree in psychology and a Master's degree in community counseling. I am a Licensed Professional Counselor (LPC) and LPC-Supervisor in metro-New Orleans, LA. I am in private practice and I also teach psychology courses at a community college. My interests are in sociocultural influences on cognition, self-perceptions, internalization, and behaviors. I am currently writing my dissertation proposal on racial differences, tripartite (media, family, and peer) influences, internalization regarding body satisfaction, and a drive for muscularity among men. I am requesting approval to use one of your measures/instruments, the Sociocultural Attitudes Toward Appearance Scale-3 (SATAQ-3). Your approval is much need and would be greatly appreciated. If you should have any questions, comments, concerns, and/or need additional information about my study, please feel free to contact me at your earliest convenience: darrell.renfro@Waldenu.edu<mailto:darrell.renfro@Waldenu.edu>

Sincerely,

Darrell Renfro, LPC-S

Appendix O: Internalization—General Subscale of the Sociocultural Attitudes Towards Appearance Scale-3

(Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004)

Please read each item carefully then, circle the number that best describes you.

| **1 Definitely disagree** | **2 Mostly disagree** | **3 Neither Agree Nor Disagree** | **4 Mostly agree** | **5 Definitely agree** |
|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. I would like my body to look like the people who are on TV. | 1 | 2 | 3 | 4 | 5 | |
| 2. I compare my body to the bodies of TV and movie stars. | 1 | 2 | 3 | 4 | 5 | |
| 3. I would like my body to look like the models that appear in magazines. | 1 | 2 | 3 | 4 | 5 | |
| 4. I compare my appearance to the appearance of TV and movie stars. | 1 | 2 | 3 | 4 | 5 | |
| 5. I would like my body to look like the people who are in the movies. | 1 | 2 | 3 | 4 | 5 | |
| 6. I compare my body to the bodies of people who appear in magazines. | 1 | 2 | 3 | 4 | 5 | |
| 7. I wish I looked like the models in music videos. | 1 | 2 | 3 | 4 | 5 | |
| 8. I compare my appearance to the appearance of people in magazines. | 1 | 2 | 3 | 4 | 5 | |
| 9. I try to look like the people on TV. | 1 | 2 | 3 | 4 | 5 | |

Appendix P: Reminder Email

Hi Participants,

I hope all is well. I would like to thank all of you who have participated in this important research on heterosexual college men's attitudes and opinions about the nature and importance of physical attractiveness. Your participation may help researchers and society in general gain a better understanding how important physical attractiveness is to you. If you have not yet completed the surveys, please do so before the study closes. Please keep in mind, the study is anonymous. You will not be asked to give your name or any identifying information.

If you have any questions, concerns, and/or comments, contact me via email at darrell.renfro@waldenu.edu after the study has closed. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 3121210. Walden University's approval number for this study is **IRB approval number: 09-15-14-0099349** and it expires on **IRB expiration date: September 14, 2015.**

Again, I thank each of you who have participated in this study and encourage those who have not participated to please do so.

Sincerely,

Darrell Renfro, LPC-S
Doctoral candidate
Walden University

## Appendix Q: Thanks for Participation Message

The survey on heterosexual college men's attitudes and opinions about the nature and importance of physical attractiveness has now closed. If you have taken this survey, your participation is greatly appreciated.

If you would like a brief report of the results, have any questions, or comments on this survey, contact me via email at darrell.renfro@waldenu.edu. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 3121210.

THANK YOU FOR YOUR TIME AND PARTICIPATION!!!

Sincerely,

Darrell Renfro, LPC-S
Doctoral candidate Walden University