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REPAIRING THE BROKEN MIRROR: UNDERSTANDING MEN'S
MUSCULARITY-FOCUSED BODY IMAGE CONCERNS THROUGH THE LENS OF
GENDER ROLE CONFLICT AND SELF-COMPASSION

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Michael S. Butchko, Ph.D.

University of Nebraska, 2016

Advisor: M. Meghan Davidson

Psychological research pertaining to the study of men and masculinity has discerned that men are increasingly becoming dissatisfied with their bodies. However, men's body image research has been neglected as researchers originally concluded that only women were impacted. However, the last 20 years has begun to elucidate factors and consequences of muscularity-focused body image dissatisfaction among men. Particularly, some men engage in dangerous behaviors (e.g., excessive exercise, dieting, steroid use) in order to obtain a body with large biceps, chiseled chest, and defined abdominal muscles. Also, more men are experiencing characteristics of muscle dysmorphia (MD), a subtype of body dysmorphic disorder, in which they believe that they are not big enough and continue to abuse steroids, excessively exercise, engage in body checking behaviors, and sacrifice work/life balance and interpersonal relationships. Although there is an increase in men with negative body image and symptoms indicative of muscle MD, there has been scant literature examining factors that precipitate and mitigate body dissatisfaction, drive for muscularity, and MD characteristics. Therefore, the current dissertation study examined a mediation model associating conformity to traditional masculine norms with body dissatisfaction, drive for muscularity, and MD

characteristics, identifying both gender role conflict and self-compassion as mediators of this relation. A total of 154 college-aged heterosexual men completed counterbalanced measures pertaining to the aforementioned constructs and results suggested that gender socialization (i.e., traditional masculine ideology and GRC) was positively related to body dissatisfaction, drive for muscularity, and MD characteristics. Also, self-compassion was found to be negatively related to body dissatisfaction, drive for muscularity, and MD characteristics. However, both self-compassion and GRC did not mediate the relationship between traditional masculine ideology and body dissatisfaction, drive for muscularity, and MD characteristics. Implications for mental health practitioners and researchers, limitations of the study, and directions for future research are provided.

Dedication

"The mediocre teacher tells.
The good teacher explains.
The superior teacher demonstrates.
The great teacher inspires."
~ William Arthur Ward

This dissertation is dedicated to all the great teachers I had while I attended St. Peter's Catholic School, Hill-Murray School, Forest Lake Area High School, the University of Minnesota Duluth, Ball State University, and the University of Nebraska-Lincoln. You all have had such a positive influence on my life and have inspired me to pursue an education that will allow me to have a positive impact within my community. I share my success with all of you.

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“So in a sense, I believe we live
on through the thoughts, feelings,
and love of those we leave behind.”

~ Austin B. Draves

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Chapter I

Introduction

Currently in the United States, an insidious cultural epidemic is occurring and is jeopardizing the physical, emotional, and psychological well-being of men. Once thought to be a “feminine issue,” research is illustrating that millions of men in the U.S. are becoming increasingly dissatisfied with their bodies (Harvey & Robinson, 2003). Particularly, it is becoming more apparent that men, like women, are not exempt from looking in the mirror and making judgments about their body shape and size. Consequently, there are a multitude of men who experience body dissatisfaction and who engage in unhealthy behaviors to modify or change their physique, potentially resulting in detrimental physical and emotional consequences (Harvey & Robinson, 2003; Maida & Armstrong, 2005).

For example, in 2005, The Learning Channel (TLC) produced a documentary titled *The Man Whose Arms Exploded*, which highlighted the use and abuse of anabolic steroids. Over the course of the documentary, the story of Gregg Valentino was elucidated (Hepton, 2005). Valentino is one of the most controversial body-building icons and is credited by the Guinness Book of World Records with the largest biceps in the world (28 inches). When younger, Valentino became active in professional body-building, but was continuously dissatisfied with his physique and was determined to become more muscular and larger in size. Therefore, Valentino began to use and abuse anabolic steroids on his quest to having the largest biceps. However, after years of anabolic steroid abuse, Valentino became careless as he reused needles and developed an infection in one of his arms. This infection led to a high fever, his arm filled with puss,

and a hematoma formed. Instead of going to the hospital, Valentino began to drain his arm with a syringe, but after failed attempts, ended up in the emergency room, almost becoming a fatality (Hepton, 2005).

Unfortunately, Valentino is not alone as many men are looking into the mirror and are not satisfied with what they see. It is as if the mirror is broken, leaving men with a distorted image looking back at them. Unfortunately, although men suffer from body dissatisfaction, research on body image has focused primarily on women and has thus neglected how men may be impacted. Nonetheless, preliminary research over the last two decades has discerned that body ideals for men and women are constructed differently as it pertains to body shape and composition (e.g, Olivardia, Pope, Borowiecki, & Cohane, 2004). Currently, the social standard for women in the United States is to be small, athletic, and thin. The social pressure to conform to this thin ideal is often described as the “drive for thinness” (Stice, 2002). Within this ideal, females will overestimate their current weight and will develop a desire to be thin. Consequently, Stice (2002) purports that this drive for thinness in females contributes to psychological consequences (e.g. disordered eating, excessive exercise, distorted cognitions). Men, however, do not endorse the same degree of drive for thinness as women (McCreary, Saucier & Courtenay, 2005). Men most often report a body ideal that is mesomorphic, which includes a lean and muscular physique, large biceps, a V-shaped chest, and toned abdominal muscles. Unfortunately, Grieve, Newton, Kelley, Miller Jr., and Kerr (2005) found that college men viewed their current bodies as not matching the cultural ideal. Particularly, the authors found that their sample of men viewed their bodies as less

muscular than what they would like to acquire and had a distorted perception of what women preferred in a man's physical appearance.

With the increasing pressure for men to obtain the muscular ideal (i.e., to be fit, lean, and muscular), there is evidence that body dissatisfaction and eating disorders are increasing among men (O'Dea & Abraham, 2002). However, it was not until the mid-1990s that men's body image concerns became a subject of thorough research (Pope, Phillips, & Olivardia, 2000). It has been purported that the dearth of research for body image dissatisfaction among men was a result of men not endorsing the "drive for thinness," thus allowing researchers to conclude that men were not impacted by body image concerns. Furthermore, the social climate has indicated to men that body preoccupation is feminine and seeking help for such concerns carries shame and stigma (Pope et al., 2000). Last, there has been a cultural perception that men, as a group, are protected from body image issues and disordered eating (Connan, 1998).

Alternatively, research has indicated that men do not endorse the thin ideal that plagues many adolescent girls and women but instead, endorse the muscular ideal, which includes the societal and interpersonal pressures to attain a heightened level of muscular development (Thompson & Cafri, 2007). Men's pursuit in becoming bigger, faster, and stronger has been termed a "drive for muscularity" and this drive leads to numerous consequences. For example, possible psychological, physical, and behavioral consequences of muscularity focused body image concerns among men include: body shape/size/weight concerns, eating disorders, compulsive exercising, low self-esteem, depression, appearance obsession, use of cosmetic surgery, anabolic steroid use, as well as poor and dangerous nutrition practices (e.g., Bahrke, 2007; Costin, 2007; Luciano,

2007; O'Dea & Abraham, 2002; Olivardia, 2001). Also, the United States is seeing an increase of men who meet criteria for muscle dysmorphia, which is a collection of attitudes and behaviors that are characteristic of an extreme desire to gain body mass (Morgan, 2008).

Moreover, research has implied that sociocultural forces have been a salient reason for the increase in men's muscle dissatisfaction. For example, over the past 30 years, male body objectification in the media has increased and the muscular ideal is continually perpetuated in the action figures boys are exposed to, as well as the magazines, movies, and comic books that young boys, adolescents, and men are accustomed to review (Barlett, Vowels, & Saucier, 2008; Leit, Pope, & Gray, 2000; Rohlinger, 2002). Moreover, young boys are socialized from a young age to internalize a set of cultural belief systems and attitudes in order to display their masculinity (Levant & Richmond, 2007). Predominantly, men are taught to avoid feminine behavior, never show weakness, strive for success and achievement, and to seek adventure and risk (David & Brannon, 1976). Despite the near impossible difficulty of achieving these standards, they are continually reinforced to young boys as they are developing cognitively, emotionally, and physically.

Additionally, some researchers (e.g., Mussap, 2008) have suggested that one of the main reasons the archetypal male physique is so important to men and boys is that it is linked to perceptions of their masculinity. The pursuit of muscularity may have implications for men beyond the desire to appear attractive. Physical bulk, particularly muscle, implies strength and dominance, both of which are consistent with the male gender role (Mussap, 2008). Recent research examining gender role orientation and

traditional attitudes about men in the context of body dissatisfaction, has demonstrated that having a rigid masculine gender role orientation is linked with men's body dissatisfaction. In particular, Schwartz and Tylka (2008) examined the relationship between gender roles and body esteem in undergraduate men and found that those who had higher levels of conformity to traditional masculine norms also had higher levels of negative overall evaluations of their body. It appears that sociocultural pressures to conform to the muscular ideal may be related to the male body being a sign of masculinity and power, and failing to achieve this ideal may have significant effects on muscle satisfaction in men (Leit, Pope, & Gray, 2001; McCabe & Ricciardelli, 2004).

Statement of the Problem and Purpose Statement

Currently, there has been an increase in the prevalence of college-aged men who are seeking psychological help for body image concerns (Davey & Bishop, 2006). Furthermore, there is an increase in the amount of men who are suffering from exercise dependence, performance enhancement abuse, and symptoms indicative of muscle dysmorphia (MD; Morgan, 2008; Parent 2013; and Pope et al., 2000). However, there is scant literature examining both precursors and protective factors of body dissatisfaction amongst men. Consequently, mental health professionals lack the knowledge, awareness, and skills in effectively assessing, diagnosing, and treating men with body image concerns.

Conceptual Framework

Gender Role Conflict. Researchers have spent the past 30 years understanding how gender socialization impacts the health and well-being of men. Originally, Pleck (1981) proposed that modern day gender roles are both opposing and shifting. In most

cases, men experience stress because of the contradiction between male-typed roles that society and culture demand (i.e., masculine attitudes, beliefs, behaviors) and naturally occurring emotions, desires, and drives. Moreover, Pleck (1995) described three types of male gender role stress: (a) discrepancy-strain, when a man fails to live up to internalized expectations of the ideal man (b) dysfunctional strain, occurring as the result of the negative consequences of living in accordance with potentially destructive gender norms, and (c) trauma-strain, the result of extreme experiences that result from gender role stress (e.g., war).

Since Pleck's (1981, 1995) conceptualizations of gender role strain, newer models, like Gender Role Conflict (GRC), have been empirically studied in order to explain the various psychological and emotional consequences that come with being a man. GRC occurs when a person's socialized gender norms prevent him from acting in a certain way or leads him to feel negatively for doing so (O'Neil, 2015). In particular, GRC purports that socialization unfavorably impacts men when certain male role norms are strictly followed or completely fulfilled. Furthermore, GRC discerns that gender roles are not biologically determined, but rather psychologically and socially constructed. Due to the discrepancy that men experience between the cultural demand of male-typed roles and their internal motivators, stress occurs which has shown to lead to risky behaviors (i.e., alcohol abuse, drug abuse, and unsafe sex practices; Levant, 2011).

Unfortunately, there has been insufficient literature examining the impact of GRC on levels of body dissatisfaction among men. However, since research has suggested that the pursuit of muscularity may be linked to men's perceptions of masculinity, it is hypothesized that those who experience GRC may also experience body dissatisfaction.

Finally, although researchers have found GRC to moderate relationships between masculine identity and other constructs, few researchers have examined the mediating relationship of GRC between traditional masculine ideology and body satisfaction, drive for muscularity, and MD among men.

Self-Compassion. Although a newer construct to Western culture, the Buddhist concept of self-compassion has warranted significant attention in psychology over the last decade in the United States. Particularly, self-compassion is based on the tenants that individuals can be self-critical, unkind, and believe that they are alone in their suffering and these ingredients can have an impact on their self-efficacy, self-esteem, and self-worth (Neff, 2003a). However, self-compassion involves having a forgiving attitude toward oneself in the face of hardship, acknowledging that suffering is part of the human experience, and believing that the self and others are worthy of understanding and compassion (Neff, 2003a). Research has demonstrated that self-compassion is a significant predictor of happiness, well-being, life satisfaction, positive affect, and hopefulness (Neely, Schallert, Mohammed, Roberts, & Chen, 2009; Neff, Kirkpartick, & Rude, 2007; Wei, Liao, Ku, & Shaffer, 2011). Moreover, research has shown that those who employ self-compassion in their everyday lives are less vulnerable to experience negative psychological outcomes (Neff, 2003a).

As it pertains to body image, research has shown that self-compassion serves as a protective factor for women from internalizing media thinness-related pressure (Tylka, Russell, & Neal, 2015). Moreover, the authors found that women who had higher levels of self-compassion had less pressure to conform to the thin ideal. Also, studies have examined how self-compassion can serve as a protective factor for eating behavior

among college-aged women. Particularly, Schoenefeld and Webb (2013) found that self-compassion was inversely linked to disordered eating and positively linked to intuitive eating. Finally, researchers have found that women with eating disorder symptomology have lower levels of self-compassion compared to women who are not suffering (Breines, Toole, Tu, & Chen, 2014).

Although research has begun to examine how self-compassion can be used to increase body satisfaction and decrease eating disorder symptomology among women, there has been limited research understanding the relationship between self-compassion and body image among men. Particularly, there is no research examining self-compassion as a protective factor for men with body dissatisfaction. Therefore, the proposed study will be adding to the literature by examining self-compassion among a sample of college-aged men and assessing if it serves as a protective factor against body dissatisfaction, which would then decrease one's drive for muscularity, which would then decrease MS characteristics.

The Current Study

The current study tested a mediation model associating conformity to traditional masculine norms with body dissatisfaction, drive for muscularity, and muscle dysmorphia characteristics, identifying both GRC and self-compassion as mediators of this relation. The current study seeks to add to the scarce literature on men's body image by determining if GRC serves as a facilitator and self-compassion as a protective factor of negative body image, drive for muscularity, and MD characteristics.

Data collection took place online and college-aged men were from a large Midwestern university (e.g., fraternities, athletics, recreations centers, classrooms), gyms

located in a large Midwestern city, and various social media outlets (i.e., Facebook, LinkedIn, and Twitter). Particularly, it is critical to study body dissatisfaction in college-aged men (18-26) because during this phase of development, men are more flexible about their gender roles, improve their critical thinking skills, and are more open to modifying their values, attitudes, and relationship styles (Robertson, 2005). Additionally, research has shown that university counseling centers are seeing an increase in men with body image concerns (Davey & Bishop, 2006). Therefore, if researchers can understand the factors that are impacting men's body dissatisfaction, more prevention programming can be implemented.

Participants were asked to complete various measures assessing their traditional masculine ideology, levels of GRC, self-compassion, body dissatisfaction, drive for muscularity, and MD characteristics. Particularly, the following hypotheses were examined.

1. There will be significant positive correlations between GRC and (a) traditional masculine ideology, (b) body dissatisfaction, (c) drive for muscularity, and (d) MD characteristics;
2. There will be significant negative correlations between self-compassion and (a) traditional masculine ideology, (b) body dissatisfaction, (c) drive for muscularity, and (d) MD characteristics;
3. There will be a significant negative correlation between GRC and self-compassion;
4. There will be significant positive correlations between the amount of day's men weight lift and (a) traditional masculine ideology, (b) GRC, (c) body

dissatisfaction, (d) drive for muscularity, (e) MD characteristics and a significant negative correlation between the amount of day's men weight lift and (f) self-compassion.

5. GRC will mediate the relationship between conformity to traditional masculine norms and body dissatisfaction, drive for muscularity, and MD characteristics (Figure 2.1);
6. Self-compassion will mediate the relationship between conformity to traditional masculine norms and body dissatisfaction, drive for muscularity, and MD characteristics (Figure 2.1).

In summary, the current chapter has provided an overview of the presenting problem and relevant constructs examined in the current study. Chapter Two will provide a more in-depth review of the current literature regarding conformity to masculine norms, GRC, body dissatisfaction, drive for muscularity, MD, and self-compassion.

Chapter II

A Review of the Literature

As a result of the feminist movement, scholars have been able to examine and understand the relations between negative body image, individual self-concept, and psychological disorders among females (see Kashubeck-West, & Tagger, 2013). However, prior to the 1990s, body image scholars only conceptualized this issue as a female problem, thus neglecting to consider and understand how this pervasive and complex phenomenon impacts both the mental and physical health of men (Pope, et al., 2000). Nevertheless, over the past 25 years, there has been a change in the way men think about their bodies, causing researchers to attend more empirical examination toward body dissatisfaction among men (e.g., Blashill & Wilhelm, 2013; Galli & Reel, 2009; Kelly, Cotter, Tanofsky-Kraff, & Mazzeo, 2015).

To extend the literature regarding men's body image dissatisfaction, the purpose of this dissertation research is to examine how gender socialization impacts the onset of body image dissatisfaction, drive for muscularity, and muscle dysmorphia (MD) characteristics among college-aged men. Furthermore, the aim of this study was to examine the possible role of self-compassion, a positive psychological construct, as a protective factor against body dissatisfaction for men. Hence, the purpose of this chapter is to provide a summary of literature pertaining to the aforementioned constructs under investigation. First, traditional masculine ideologies will be operationalized and conformity to masculine norms will be articulated. Next, gender role conflict (GRC) theory will be elucidated in an attempt to tie masculinity to muscularity. Next, scholarship pertaining to men's body image, drive for muscularity, and MD will be

summarized. Finally, literature on the Buddhist concept of self-compassion will be presented along with an overview of the current study.

Men's Conformity to Traditional Masculine Norms

Over the past four decades, significant and harmful trends are beginning to emerge with regard to men living in the United States. For example, 85% of sentenced prisoners are male (Minton & Zeng, 2015), 94% of school shootings between 1979 and 2011 were committed by males (Klein, 2012), 8.2% of boys in grades 9 through 12 have carried a gun to school (Eaton et al., 2012), and 80% of high school boys have reported being bullied by other boys (U.S. Census Bureau, 2005). Furthermore, on average, men die nearly five years younger than women and have higher death rates for 9 of the 15 leading causes of death (e.g., heart disease, Parkinson's disease, liver disease, and accidents due to unintentional injuries; Centers for Disease Control and Prevention, 2013). Finally, there are significant mental health concerns experienced by men. For example, 30% have lifetime prevalence rates for alcohol and drug dependence (Robin & Reiger, 1991), 10% report experiencing depression while 14% report experiencing anxiety (Schiller, Lucas, & Peregoy, 2012), one in five high school-age boys have been diagnosed with attention-deficit/hyperactivity disorder (Visser et al., 2014), and 18.1% of male (aged 20-24) deaths are caused by suicide (Centers for Disease Control and Prevention, 2013). These unfortunate trends are beginning to elucidate the multitude of physical and psychological consequences that come with identifying as a man in the United States. However, researchers are beginning to examine why such detrimental health hazards are attaching themselves to men.

The new psychology of men. Scholarship pertaining to the examination of men

and masculinity is still in its early stages of development, as it has not been critically examined until recently. Particularly, archaic conceptualizations of this multidimensional construct involved research designs in which affluent and heterosexual White men composed a majority of the samples. Unfortunately, those results were then generalized to men from various cultural backgrounds (Levant, 1996). However, as the culture in the United States has evolved and diversified, scholars have begun to shift their lens to understanding how gender and culture impact the physical, emotional, and psychological health of men from various backgrounds. For example, the feminist movement of the 1970s was an instrumental period in which feminist psychologists criticized conventional gender roles and vehemently denigrated biased research differences between genders (Goldberg, 1977). Captivatingly, this revitalized area of inquiry, termed “The New Psychology of Men,” allowed feminist scholars to begin to examine, understand, and elucidate gender issues, pertaining to men, with the same level of critical thinking that researchers had been employing toward the studies of women (e.g., Levant & Pollack, 1995). Additionally, patriarchal values were challenged and greater attention was placed on understanding the complexities of masculinity.

Since its inception, the New Psychology of Men movement has provided a framework for a psychological approach to understanding men and masculinities. Moreover, this new movement has utilized critical examination through the lens of gender socialization in understanding the complex problems pertaining to career, interpersonal relationships, mental health, and life satisfaction men in the United States face. Furthermore, this movement has led to new considerations of the complexity of masculinity by differentiating between “sex” and “gender.” Particularly, Kimmel and

Messner (1989) articulate that although an individual may identify one's sex as male, his identity as a man is developed by interacting with his environment, through observing others, and by learning appropriate ways to display his gender in a way that will be accepted.

Social constructivism and gender role development. In understanding the social development of boys, previous explanations of masculinity and men's health have traditionally utilized the sex role theory of socialization (e.g., Goldberg, 1976; Harrison, 1978). However, recent scholars are critical of applying this theory because it purports only one type of male personality, assumes that men have innate psychological needs for gender-stereotypic traits, and implies that gender represents "two fixed, static and mutually exclusive role containers" (Kimmel, 1986, p. 521) for boys and girls. Alternatively, social constructivist theorists contend that male gender roles are not enacted simply through fulfilling role identities or due to innate psychological traits, but as viewing boys and men as active agents in constructing and reconstructing dominant norms of masculinity (Pleck, Sonenstein, & Ku, 1994). Furthermore, according to Gerson and Peiss (1985), gender is "a set of socially constructed relationships which are produced and reproduced through people's actions" (p. 327). Finally, the construct of gender is a dynamic and social structure, and has been articulated as something that does not reside in the individual person but is defined through social interactions (Bohan, 1993).

From a social constructivist perspective, Eisler (1995) discerned that from an early age, boys learn to appraise their abilities based upon their capacity to behave with respect to a particular set of male gender norms. Furthermore, Englar-Carlson (2006)

purported that boys begin to develop their own sense of self-worth by measuring their ability to live up to these socialized norms of what it means to be a man. Finally, Pleck (1995) espoused that the social construction of gender contains no single standard that men should strive to obtain because masculinity varies across various identities (e.g., race, ethnicity, socioeconomic status, sexual orientation, and social changes). Therefore, the process into which young boys are socialized to endorse various masculine stereotypes is known as masculinity ideology. According to Levant and Richmond (2007), traditional masculine ideology is “an individual’s internalization of cultural belief systems and attitudes toward masculinity and men’s roles. It informs expectations for boys and men to conform to certain socially sanctioned masculine behaviors to avoid certain prescribed behaviors” (p. 131).

Hegemonic (toxic) masculinity. Kupers (2001) highlights various ways in which men display their masculinity. For example, there are men who are caring, men who are able to regulate and show emotions to their loved ones, men who take pride in being a part of their children’s lives, and men who are able to express their appreciation and love to their male role models. According to Kupers (2001), these are nontoxic aspects of masculinities. However, researchers have contended that there is a dominant set of notions pertaining to masculinity, defined as hegemonic masculinity (Connell, 1987), which involve more toxic aspects. According to Connell (1987), hegemonic (toxic) masculinity shapes the socialization and aspirations of young males. Particularly these toxic aspects of masculinities are built upon: (a) the domination and devaluation of women; (b) ruthless competition; (c) inability to express one’s emotions (other than anger); (d) an unwillingness to admit weakness or dependency; and (e) stigmatization of

sexual minorities. These standards serve as benchmarks for men in that the more closely a man conforms to these standards, the closer he is to “being a man.”

Unfortunately, these traditional masculine norms are upheld in the United States and are infused into the development and socialization of young boys (e.g., Levant 1996; Pleck et al., 1994). According to O’Neil (1981), there is a societal blueprint ingrained within men. In this blueprint, there is a set of directions that young boys must follow in order to adhere to the aforementioned standards and be respected as a man. For example, traditional masculine ideology is based on the following principles: (a) men are biologically superior to women; (b) power, dominance of others, competition, and control are essential; (c) emotions and vulnerability are feminine and should be avoided; (d) vulnerability and affection toward other men should be avoided in an effort to avoid perceptions of homosexuality; (e) work and career success are measures of masculinity; and (f) men should be the financial providers and women should be the caretakers (O’Neil, 1981). In summary, this value system teaches young men to promote sexism, display stigma towards sexual minorities, exhibit power, aggressiveness, and dominance in order to earn respect from others, and teaches them to become fearful of any action that would be deemed as feminine.

Traditional masculine scripts. Taking into consideration the value system of hegemonic masculinity, researchers have expounded upon several salient cultural scripts that boys and men display in order to live up to prescribed masculine gender norms. According to Mahalik, Good, and Englar-Carlson (2003a), the “Strong and Silent” script emphasizes the importance for boys and men to be in control of their feelings, which leads to restrictive emotionality. Operationally defined as having reservations and fears

about expressing one's feelings, restrictive emotionality is considered to be a key feature of traditional masculine norms (Brannon & Juni, 1984; Eisler & Skidmore, 1987; O'Neil, Helms, Gable, David, & Wrightman, 1986). There has been evidence suggesting that young boys are socialized by prominent figures (e.g., parents, teachers, coaches, and peers) to put on a "mask" and restrict experiences and expressions of vulnerable emotions (Stoltz, 2005). Consequently, when young boys take their masks off and express vulnerable emotions like sadness, guilt, and fear, they are often punished or penalized by their peers, which may lead to the eventual control and limitation of such displays in order to avoid increased psychological distress and social criticism.

Consequently, research has demonstrated that a prominent cost of restrictive emotionality in childhood is emotional dysregulation in adulthood (Wong, Pituch, & Rochlen, 2006). Gratz and Roemer (2004) define emotional dysregulation as a multidimensional construct representing maladaptive responses to emotional states. Particularly, the dimensions of emotional dysregulation include: (a) a lack of awareness, understanding, and acceptance of emotions, (b) limited access to adaptive strategies for regulating the intensity and duration of emotion states, (c) an unwillingness to experience emotional distress, and (d) an inability to control behavior in the presence of emotional distress. It has been noted that aggression functions as a coping strategy to manage emotional dysregulation among men in an attempt for them to regain control over interpersonal situations associated with feelings of vulnerability and negative affect arousal (Cohn, Zeichner, & Seibert, 2008).

Furthermore, research has indicated that emotional dysregulation is not the only consequence for young boys and men who are emotionally restrictive. For example,

Jacobson, Marrocco, Kleinman, and Gould (2011) employed a survey with over 2,000 high school aged boys in which restrictive emotionality, depressive symptomology, suicidal ideation, and history of suicide attempt were measured. After conducting a logistic regression model, in which the authors attempted to determine if restrictive emotionality served as a mediator between depressive symptomology and suicidal ideation, the authors concluded that restrictive emotionality did indeed serve as a partial mediator. Therefore, high school aged boys who reported high restrictive emotionality were over 11 times more likely to have elevated depressive symptoms than those who reported lower levels of restrictive emotionality. Finally, boys who endorsed high restrictive emotionality also endorsed more suicidal ideation and suicide attempts.

The second script articulated by Mahalik et al. (2003a) is the “Tough-Guy” script, which encourages boys and men to be perceived as strong, fearless, and invulnerable. Boys are encouraged to take more risks and engage in more extreme behaviors compared to girls. Regrettably, research evidence indicates that men who adhere to this script do not feel comfortable expressing their genuine and honest emotions and are likely to turn to less healthy coping mechanisms. Specifically, men who adhere to this script and do not feel comfortable showing vulnerability are experiencing deleterious behavioral (e.g., drug use, pornography consumption), emotional (e.g., anger, frustration), and psychological (e.g., depression, anxiety, suicidal ideation) consequences (e.g., Cohn, Jakupcak, Seibert, Hildebrandt, & Zeichner, 2010; Hammond, 2012; Jacobson et al., 2011; Lu & Wong, 2013).

Third, the “Give-‘em Hell” script emphasizes that boys and men display violence and aggression in order to obtain power, status, and reverence from others (Mahalik et al.,

2003a). Particularly, young boys are socialized to be aggressive and fight in order to protect themselves from being bullied and to earn respect from their peers. As boys progress through physical and emotional development, they are socialized by their parents and peers to watch and participate in violent sports such as boxing, mixed martial arts, wrestling, football, and ice hockey. Later in life, men may join other male dominated organizations (e.g., military, fraternity, intramural sports) in which violent peer hazing occurs in order to be initiated into the group. Therefore, boys and men learn from a young age that in order to be accepted, they have to be physically aggressive and violent. Unfortunately, this sample of men are more likely to condone and engage in physical, sexual, and psychological violence within intimate partner relationships in order to maintain power and control and to not be seen as weak or vulnerable (McDermott & Lopez, 2013).

The “Playboy” script encourages men to overlook intimacy and emotional connectedness with one romantic partner and replace it with sexual promiscuity with many partners (Mahalik et al., 2003a). Men who act out this script are more likely to prefer gender inequality within intimate partner relationships, express low levels of intimacy and communication with their partner, and are more likely to support rape myths (Brooks, 1998; Levant, 1997). Moreover, men who fit this script tend to be fearful of being vulnerable within a relationship and therefore, tend to only search for “one night stands” with as many women as possible. Playboys seek relationships with women that require little communication or caring and look for relationships that are based primarily on sex.

The “Homophobic” script requires men to avoid intimate connection with other men. Moreover, the script encourages men to avoid any features associated with feminine behavior or behaviors that are indicative of being gay (Mahalik et al., 2003a).

Furthermore, men who enact this script are fearful of being perceived as gay and will display exaggerated masculine behaviors and attitudes (e.g., denigrating women, making sexist comments, making homophobic comments, avoiding contact with other men, calling other men who display feminine characteristics gay) so as not to be labeled by others as gay (Kimmel, 2010).

The “Winner” script emphasizes competition, success, and winning at all costs. Not only is this script reinforced to boys and men as it pertains to competitive sports, but also is desired by many men in the workforce (Mahalik et al., 2003a). Men are encouraged to succeed in their career, to obtain promotions, and to become the financial provider for their family. However, this mentality can cause significant physical and mental health consequences. For example, men who have a “Winner” mentality are more prone to experience stress in the workplace and this stress contributes to elevated blood pressure and other cardiovascular health problems compared to women (Good, Sherrod, & Dillon, 2000). Furthermore, from a psychosocial perspective, men who endorse winning, success, competition, and power “display more controlling and rigid interpersonal behavior, more immature psychological defenses, and more paranoia” (Mahalik et al., 2003a, p. 126).

Finally, the “Independent” script espouses rigid adherence to self-sufficiency and a lack of significant attachment in interpersonal relationships (Mahalik et al., 2003a). Particularly, when boys are developing, the notion that men should be able to accomplish

tasks on their own is reinforced and that it is a sign of weakness to become dependent or to ask for help. Consequently, men seek help for problems as diverse as depression, substance abuse, physical disabilities, and stressful life events less often than women and this can have significant health implications (Galdas, Cheater, & Marshall, 2005). For instance, it has been documented that despite lower rates of depressive disorders among men compared with women, men's suicide rates are three times higher than that of women (Crosby, Han, Ortega, Parks, & Gfoerer, 2011). The authors contend that prevalence rates for suicide among women are lower because they are more willing to obtain psychological treatment upon onset of symptoms indicative of depression compared to men.

Recently, scholars interested in the psychology of men and masculinity have employed various research methodologies in an attempt to understand help-seeking behavior among men who endorse traditional masculine norms. For example, McKelley and Rochlen (2010) explored the relationship between men's conformity to traditional gender role norms and their attitudes, stigma, and preferences for seeking professional help from two different service models (i.e., therapy and executive coaching). The authors found that those who endorsed higher levels of conformity to traditional masculine norms were more likely to view a help-seeking relationship as stigmatizing compared to men who conformed less to those norms.

Furthermore, Vogel, Heimerdinger-Edwards, Hammer, and Hubbard (2011) examined a mediation model in which self-stigma of seeking counseling services was proposed to mediate the relationship between conformity to masculine norms and attitudes toward counseling. Interestingly, the authors collected data from over 5,000 men

from various cultural backgrounds and found that men with higher endorsement of traditional masculine norms had less favorable attitudes toward seeking psychological help. However, this relationship was partially mediated by the degree to which men experience self-stigmatization. Finally, Graef, Tokar, and Kaut (2010) collected data from 179 college aged men and found that men who endorsed traditional masculine norms viewed career counseling as less valuable, attached a greater stigma to such services, and reported less willingness to seek career counseling in the face of a career-related problem.

In summary, there are a core set of masculinity scripts that are reinforced to young boys and men as a blueprint for how they should behave. These scripts regarding appropriate masculinity are reinforced through television, magazines, books, and video games. For example, the epitome of a man who endorses traditional masculine ideology was portrayed in the 2009 motion picture *Avatar* (Cameron, & Landau, 2009). Deemed the antagonist of the movie, actor Stephen Lang played the character of Colonel Miles Quaritch, chief of security on Pandora. Throughout the duration of the movie, Quaritch was responsible for the security of the Hell's Gate facility and its personnel. Quaritch appeared like a lifelong military man, as his hair was short, he was covered with battle scars, and was in outstanding physical condition. He was a charismatic military leader and his men respected him. However, he displayed no regard for the indigenous life on Pandora, carrying out acts of violence and destruction. Particularly, Quaritch embodied the following masculine scripts; (a) strong and silent; (b) tough guy; (c) give-'em hell; (d) winner; and (e) independent. Throughout the duration of the film, he was strong,

aggressive, and stoic. Furthermore, Quaritch displayed restricted emotionality, embodied leadership qualities, and was willing to die before surrendering.

Although just one example, traditional masculine scripts are continuously reinforced to young boys and men as they develop. However, what happens when boys and men fail to live up to these internalized expectations of the ideal man? In the following section, research examining gender role conflict will be elucidated.

Men's Gender Role Conflict (GRC)

Gender role strain theory. First conceptualized by Pleck (1981, 1995) as a social psychological concept, gender role strain emphasized that gender roles for girls and boys are inconsistent, often contradict one another, and can lead to real or imagined psychological distress. Particularly, 10 different propositions were formulated as it pertained to Pleck's (1981) theory: (a) gender roles are operationally defined by gender role stereotypes and norms; (b) gender role norms are contradictory and inconsistent; (c) the proportion of individuals who violate gender role norms is high; (d) violating gender role norms leads to social condemnation; (e) violating gender role norms leads to negative psychological consequences; (f) violating gender role norms has more severe consequences for males than females; (g) actual or imagined violation of gender role norms leads individuals to over-conform to them; (h) certain characteristics prescribed by gender role norms are psychologically dysfunctional; (i) each gender experiences gender role strain in its paid work and family roles; and (j) historical changes causes gender role strain (p. 9). Furthermore, inherent in these propositions are three broader ideas about how cultural standards for masculinity have potentially negative consequences for individual males (Pleck, 1995); these include gender role discrepancy strain, gender role

trauma strain, and gender role dysfunction strain.

Gender role discrepancy discerns that men attempt to conform to stereotypic masculine principles. However, men who do not conform to these prescribed standards may experience adverse internal self-judgments and negative social feedback from peers. Consequently, these men are at risk for experiencing decreased levels of self-esteem and psychological well-being (Pleck, 1995). Secondly, male *gender role trauma-strain*, postulates that there are components of male gender socialization and adherence to traditional masculine norms that are traumatic for some men. For example, gay men living in a heterosexist society may experience normative trauma due to the overt and covert forms of discrimination, stigma, and oppression they endure on a daily basis. Particularly, these forms of discrimination have been examined in the workplace, schools, and community (e.g., Smith, & Ingram, 2004; Woodford, Kulick, Sinco, & Hong, 2014). Finally, the third major subtype of male gender role strain, male *gender role dysfunction strain*, proposes that socially desirable and acceptable characteristics associated with male gender norms (e.g., aggression, fear of femininity, homophobia) can have negative consequences for both men and women because many of these characteristics are negative.

Although Pleck's (1981, 1995) model was one of the first theoretical conceptualizations to expand knowledge about men, there were some scholars who were critical of the propositions articulated. Particularly, O'Neil (1981a, 1982) concluded that unlike Pleck's (1981) assertions, (a) sexism does not only impact men but also impacts women and (b) gender role strain is a significant mental health issue for both men and women. Therefore, newer models, like Gender Role Conflict (GRC), have been

empirically studied in order to explain why men were “sexist, dysfunctional, unhappy, violent, and conflicted because of their socialized gender roles” (O’Neil, 2015, p. 33). In the following paragraphs, GRC will be articulated.

Defining GRC. Over the past 35 years, male GRC has received a plethora of empirical attention and has evolved from a series of theoretical and research manuscripts (e.g., O’Neil, 1981a, 1981b, 1982, 1990, 2008, 2015). Currently, GRC is operationally defined as “a psychological state in which socialized gender roles have negative consequences for the person or others” (O’Neil, 2015, p. 42). Moreover, GRC occurs when rigid and/or restrictive gender roles result in three types of personal/interpersonal experiences: (a) gender role devaluation; (b) gender role restriction; and (c) gender role violations.

Gender role devaluation occurs when men begin to devalue their sense of worth due to their inability to achieve masculine norms dictated by traditional masculinity ideologies (O’Neil, 2015). Interestingly, these devaluations can be self-inflicted or can be brought upon from others. For example, a self-devaluation occurs when a man becomes unemployed and is not able to financially provide for his family. Alternatively, men can be devalued by others. For example, a gay man may have to endure years of being bullied from his peers because he deviates from the traditional masculine stereotypes.

Secondly, *gender role restriction* occurs when GRC limits oneself to enact restrictive norms of masculinity ideology. These occur when masculine norms prohibit flexibility in various psychosocial situations for men, thus negatively impacting relationships with family, friends, and/or colleagues (O’Neil, 2015). For example, a man may devote most of his time and energies to his career endeavors. Consequently, he may

not have the time or energy to spend quality time with his family, thus experiencing decreased intimacy with his romantic partner and feeling distant from his children. Furthermore, due to these inflexible pressures, he may feel overwhelmed at work, experiencing stress and feeling like he is not able to relax or maintain a healthy work/life balance.

The final and most severe personal/interpersonal experience of GRC are *gender role violations*. These violations occur as a result of men adhering to destructive gender role norms of masculinity ideology (O'Neil, 2015). Unfortunately, in order to uphold stereotypical masculine norms, men encroach upon their mental health by becoming overworked at their job, experiencing excessive stress, engaging in risky behaviors, and abusing substances all in order to dull painful emotions and life stressors. Furthermore, vulnerable emotions (e.g., sadness, anger, fear, shame) that are not expressed by men become internalized and consequently, can cause chronic depression, isolation, feelings of shame, guilt, self-hatred, and low self-esteem (O'Neil, 2015).

Older conceptualization of GRC. The original GRC model discerned that men's fear of appearing feminine was the driving force behind adherence to traditional masculine norms and GRC (O'Neil et al., 1986). Particularly, negative beliefs associated with femininity are learned early in life and are formed by interactions with parents, teachers, and community leaders (O'Neil, 1981). By devaluing femininity and those that engage in feminine behavior (e.g., women, children, gay men), men seek to express superiority, power, status, and prestige. Most importantly, men may fear that exhibiting feminine behaviors could lead to disrespect, weakness, or emasculation.

The combination of gender role socialization toward traditional masculine norms

and fear of femininity influence GRC across four life domains, including: (a) Success, Power, and Competition (SPC); (b) Restrictive Emotionality (RE); (c) Conflicts Between Work and Family Relations (CBWFR); and (d) Restrictive Affectionate Behavior between Men (RABBM; O'Neil, 2008). First, SPC emphasizes that men who endorse traditional masculinity believe that power and status are ways to prove their masculinity and men work hard to achieve respect from others, high status, and personal gain (O'Neil, Good, & Holmes, 1995). Second, RE refers to having fears and reservations about expressing emotions, giving up emotional control, or being vulnerable. To men who endorse traditional masculine ideologies, showing emotions are a sign of weakness and are viewed by other men as a sign of immaturity, feminine, and weak (O'Neil, 1981). Third, CBWFR pertain to difficulty that men experience in balancing their work and family responsibilities (O'Neil, 2008). Men who enact gender roles related to CBWFR may spend more time pursuing their career and less time toward their family responsibilities. Doing this will help them obtain power, success, and respect in the workplace without looking feminine by taking care of their family responsibilities. Finally, RABBM limits expression of emotions, affection, and physical contact between men (O'Neill et al., 1995). Particularly, men who engage in gender norms related to RABBM may be attempting to exude masculinity by avoiding behaviors that may lead them to be perceived as gay, feminine, or weak.

This older GRC model was the basis for the creation and implementation of the Gender Role Conflict Scale (GRCS; O'Neil et al., 1986). The GRCS is a 37-item measure designed to assess aspects of male gender role conflict that have negative consequences or impact on the individual. The items are scored on a 6-point Likert-type

scale and consist of the four aforementioned factors. The GRCS has been used in a number of published articles, dissertations, and other GRC studies over the past few decades. According to O'Neil (2015), the GRCS has been used in 181 peer-reviewed, published manuscripts and 235 doctoral dissertations. Foremost, many scholars have used the GRCS to understand the various costs that men experiencing GRC endure. Therefore, the following section will summarize various psychological and interpersonal consequences that men with GRC experience.

Consequences of GRC. There has been a plethora of research to support the earlier conceptual model of GRC. For example, the four aforementioned factors of the GRCS have been associated with low self-esteem (Blazina, Settle, & Eddins, 2008), heightened levels of shame and guilt (Thomas, 2009), increased levels of psychological distress (Hayes & Mahalik, 2000), higher rates of alcohol dependence and substance abuse (Magovcevic & Addis, 2005; Uy, Massoth, & Gottdiener, 2014), decreased levels of relationship satisfaction/intimacy struggles (Breiding, 2004), and greater rates of suicide (Houle, Mishara, & Chagnon, 2008) for men. Furthermore, researchers have examined GRC among college-aged men as it pertains to levels of depression, interpersonal relationships, men's violence towards women, and help-seeking behaviors.

Mahalik and Cournoyer (2000) attempted to understand the relationship between internalized messages pertaining to gender socialization and depression among college-aged and middle-aged men. The researchers found that GRC items did indeed differentiate men who met criteria for depression and men who did not. Particularly, depressed men scored higher on all four of the subscales compared to non-depressed men. The authors articulated that men who score higher on the GRCS believe (a) a man's

value is predicated on his ability to be successful, (b) negative consequences result from sharing one's feelings with others (especially with other men), and (c) work must come before family, leisure, or taking care of oneself. Altogether, Mahalik and Cournoyer (2000) conclude that this subgroup of men are more at-risk for experiencing depressive symptomology compared to men who score lower on the GRCS.

Furthermore, researchers have found that men with elevated levels of GRC also experience deleterious effects pertaining to their interpersonal relationships. For example, Wester, Christianson, Vogel, and Wei (2007) found that the four different subscales of the GRCS predicted psychological distress among college-aged men. Also, men who scored higher on the RE and the RABBM subscales of the GRCS had decreased levels of social support, which accounted for their increased psychological distress. The authors hypothesized that men who adhere to traditional masculine norms avoid activities that may seem feminine (e.g., social support) in order to enhance their masculine identity. Consequently, these men feel isolated, alone, and psychologically distressed. Finally, Blazina and Watkins, Jr. (1996) investigated the effects of GRC on college men's scores of psychological well-being, and found that both the SPC and RE subscales of GRC were significantly related to a decrease in psychological well-being. More specifically, an important relationship existed between SPC subscale of the GRCS and trait anger on the psychological well-being measure. The authors purported that this relationship exists because men who are socialized to adhere to traditional gender norms believe that anger is the only emotion they are encouraged to express, and this emotion becomes a funnel system into which all their vulnerable emotions get channeled.

Moreover, there has been an increase in scholarship examining how GRC impacts

men's violence against women. For example, O'Neil (2015) articulated that there is a positive and significant correlation between GRC and sexually aggressive behaviors, engagement in forceful sex/abusive behaviors, acceptance of rape myths, and increased levels of displaying violence, aggression, and intimidation toward women. Furthermore, Hill and Fischer (2001) found that men who scored high on SPC, RABBM, and CBWFR had an increased sense of sexual entitlement, which mediated the relationship between masculinity and rape-related variables. Finally, Senn, Desmarais, Verberg, and Wood (2000) found that college-aged men who score high on RE and RABBM were more sexually aggressive and coercive toward women and engaged in higher rates of abusive behaviors compared to college-aged men who scored lower on the two subscales. In summary, men's GRC is related to abusive thoughts, attitudes, and behaviors that are denigrating, violent, and abusive toward women.

Additionally, researchers have examined how men's GRC impacts their willingness to seek counseling services from a mental health professional. For example, Berger, Levant, McMillan, Kelleher, and Sellers (2005) examined men's GRC, traditional masculine ideology, and help-seeking, and found that men who scored higher on traditional masculine ideology and the RABBM subscale of the GRCS had more unfavorable attitudes towards seeking help for mental health concerns. Moreover, in an attempt to elucidate a more complete model of how GRC is related to college-aged men's willingness to seek counseling for psychological and interpersonal concerns, Pederson and Vogel (2007) examined three different mediators (i.e., self-stigma associated with seeking counseling, tendency to disclose distressing information, and attitudes toward seeking counseling) and found that all three variables partially mediated the relationship

between GRC and willingness to seek mental health services. Particularly, men experiencing higher levels of GRC were more likely to self-stigmatize about receiving help, less likely to self-disclose distress, and demonstrated less willingness to receive counseling compared to men with lower levels of GRC.

Finally, research has not only examined how men's GRC impacts their willingness to seek counseling services, but has also examined their willingness to refer other men and family members to receive such services. Vogel, Wester, Hammer, and Downing-Matibag (2014) explored how college-aged men's GRC were associated with mental health stigma and willingness to refer friends and family experiencing a mental health concern to receive help. In summary, the authors found that men with higher levels of RE were less likely to refer friends and family to seek mental health treatment compared to men with lower levels of RE. Furthermore, men with higher levels of RABBM endorsed greater stigma, which then led to them being less willing to refer a friend or family member to receive mental health treatment compared with men who had lower levels of RABBM.

In summary, the literature regarding psychological consequences of men's GRC is beginning to grow. However, in recent years, critics have come forward and have articulated their evaluations of the original GRC model and the GRCS. In the following section, a summary of those critiques will be provided.

Evaluation of older model and GRCS. In examining GRC and the GRCS, scholars have proposed their critical evaluations. Foremost, critics have argued that researchers have failed to assess GRC longitudinally by identifying and understanding various developmental tasks and contextual demands that impact the socialization of men

(Enns, 2000; Smiler, 2004). Second, there has been limited research investigating how GRC affects other individuals (e.g., family members, romantic partners, and children) and how GRC is experienced when displayed from other men (Rochlen & Mahalik, 2004). Moreover, the GRCS has been criticized because it only measures a small portion of behavioral domains and neglects to measure other salient domains (e.g., men's sexuality, homophobia, performance, and health issues) for men's behavior (Thompson & Pleck, 1995). Finally, critics have argued that GRC theory is trait-based and does not address states of men's experience. Particularly, opponents have discerned that men's GRC theory has ignored attending to situational circumstances as they pertain to real-life incidents that impact the lives of men (Addis, Mansfield, & Syzdek, 2010). Particularly, the original GRC model does not explain how, when, or why a man becomes conflicted with his gender roles. In summary, the critics agreed that newer models of men's GRC that are more complex and comprehensive need to be examined in order to better explain the socialization of men from various cultural backgrounds.

Current contextual model of GRC. Since critics emphasized that gender roles are influenced by a myriad of contextual factors (e.g., personal, cultural, political, societal), a new descriptive contextual model of men's gender role socialization, GRC, and psychological and interpersonal problems was developed (O'Neil, 2015). Particularly, within this new model, O'Neil (2015) expanded the understanding of gender roles and GRC as they pertain to context in hopes of replacing the original GRC model. The new model consists of three interrelated parts: (a) life stages and psychosocial developmental tasks; (b) macrosocietal contexts; and (c) gender related contexts.

According to the model, as young boys learn to understand and accept their

gender identity, they progress through various life stages of development. However, during these stages, young boys are confronted with various psychosocial predicaments, which have the capability of activating GRC (O'Neil, 2015). However, as boys begin to develop and experience these predicaments, some begin to examine how gender role socialization, patriarchy, and sexism impact their lives. Therefore, some boys both acquire and apply a certain set of coping strategies to help them through these predicaments. Subsequently, boys who are able to do this will continue to progress through the various life stages of development and will work toward solidifying a healthy and positive masculinity (O'Neil, 2015). Unfortunately, for those who are not able to examine how sexism and gender socialization impacts their life, they will have a more challenging time effectively coping with the various life stressors they experience and will be susceptible to GRC.

Furthermore, as boys/young men develop into their gender identity, their socialization is impacted by a distinct set of macro societal contexts, which include a combination of social, economic, and political systems. Particularly, these contexts are predicated on patriarchal values, which have resulted in boys and men being restricted by gender stereotypes. Principally, according to O'Neil (2015), there are three macro societal contexts: (a) patriarchy, hegemonic masculinity, and sexism; (b) personal and institutional oppression (e.g., racism, heterosexism, classism); and (c) toxic gender stereotypes.

Foremost, the culture in the United States at the political, community, and individual levels espouses a patriarchal society that encourages men to be dominant over women. As a result, women are victims to both oppression and discrimination in a

plethora of arenas (e.g., politics, religion, and career). Under these patriarchal guidelines, men continue to gain privileges and are not forced to examine how their socialization, thoughts, and behaviors (e.g., dominance, aggression, power, self-reliance) lead to sexist stereotypes of women (O'Neil, 2015).

Moreover, along with living in a patriarchal, misogynistic, and sexist society, O'Neil (2015) articulates that patriarchal values and stereotypes lead to various forms of personal and institutional oppression of all minority cultures. Viewing GRC as a construct that is debilitating at both the individual and systemic level, men attempting to adhere to traditional masculine norms learn to devalue femininity, desire to win at all costs, and to avoid looking weak, vulnerable or powerless. Through these beliefs, men engage in both overt and covert forms of discrimination toward minority cultures, which are continually oppressed, marginalized, and stigmatized. In summary, O'Neil (2015) argued that GRC is not just a personal issue, but one that leads to systemic oppression and marginalization due to imbalances of power, privileges, and resources.

The final macrosocietal component that O'Neil (2015) examines is the differences in gender socialization that occurs between girls and boys. Particularly, boys are continuously reinforced by parents, teachers, peers, coaches, and community leaders to sustain patriarchy and oppression of women and other minority groups. Examples include teaching boys to be strong, competitive, forceful, and aggressive in all endeavors in which they engage. Furthermore, boys are taught that they have more value, agency, intelligence, and strength than girls. Finally, boys are socialized to not engage in any behavior that might be deemed as feminine (e.g., “stop throwing like a girl,” “stop crying like a girl”), which reinforces the idea that boys are socialized to be superior to girls.

In summary, patriarchy and hegemonic masculinity, personal and institutional forms of marginalization of minority groups, and differences in the gender socialization process of boys and girls all result in GRC. These three macrosocietal components are embedded into the culture of the United States and often go unexamined at both the individual and systemic level. However, these three components do influence an individuals' gender role experiences, and the continuous marginalization, oppression, and abuse of women and minority groups leads to both interpersonal and psychological problems for men, thus leading to various patterns of GRC (O'Neil, 2015).

The final perspective in this new conceptual model of GRC are gender related contexts, which include gender role identity and patterns of GRC. According to O'Neil (2015), various biological, social, psychological, cultural, and situational contexts combine together to impact one's gender role socialization, as well as GRC. Foremost, gender role identity has been identified as a salient gender context because it is "the total conception of one's roles, values, functions, expectations, and belief system and includes everything a person does to communicate his or her masculine and feminine dimensions" (O'Neil, 2015, p. 62). However, due to restrictive and sexist masculinity ideologies, fear of femininity, and distorted gender role schemas, many boys and young men experience GRC.

Finally, there are prominent patterns of GRC contexts, which cause both interpersonal and psychological problems for boys and men. Particularly, these contexts include: (a) masculine defenses, which allow men to avoid dealing with GRC; (b) gender role devaluation, restrictions and violations, which are personal experiences of GRC that negatively impact the development of men as it pertains to various domains (e.g., career,

family, health); and (c) masculine vulnerability, which occurs when unresolved GRC leads to hidden feelings of weakness or shame for failing to live up to traditional masculine norms and can lead to depression, anxiety, unemployment, addiction, and/or divorce. In summary, the proposed contextual model of GRC expands the earlier theory and raises numerous theoretical and empirical questions to be pursued.

When examining GRC among college-aged men, there is one dependent variable that has not received much empirical attention. Although intrapersonal consequences have been examined (e.g., substance use, depression, anxiety, stress), there has been limited research investigating the relationship that GRC has on men's body image, their drive for muscularity, and muscle dysmorphic symptoms. Therefore, the following sections will introduce these variables, and literature pertaining to these constructs will be elucidated.

Men's Muscularity-Focused Body Image Concerns

Research trends. Researchers interested in understanding the etiology and treatment of eating disorders have allocated much time and attention to understanding body dissatisfaction (BD) among women. Through empirical studies, researchers have identified sociocultural, biological, and psychological variables that contribute to the onset of women's BD (e.g., Capodilupo & Forsyth, 2014; Hefner, Woodward, Figge, Bevan, Santora, & Baloch, 2014; Ward & Hay, 2015). Foremost, Stice (2002) articulated that the sociocultural standard of beauty and desirability for women in the United States is to be small, athletic, and thin. Therefore, the social pressure to conform to this ideal is often described as the drive for thinness (Stice, 2002). Within this ideal, females will overestimate their current weight and will develop a desire to be thin. Consequently,

Stice (2002) discerned that this drive for thinness among females contributes to negative psychological consequences including disordered eating, excessive exercise, and distorted cognitions about the body.

Alternatively, gender socialization within the United States has hindered researchers and practitioners from empirically investigating BD among men. Particularly, there has been a combination of factors that have led to limited scientific inquiry. Foremost, researchers have purported that most men do not endorse a drive for thinness, but instead endorse a drive for muscularity (McCreary, Saucier, & Courtenay, 2005). Second, Pope et al., (2000) discerned that the social climate in the United States has reinforced to men that body preoccupation is feminine and seeking help for such concerns carries shame and stigma. Therefore, men who do not endorse a drive for thinness, or do not share their concerns about their body, has led researchers to conclude that men do not experience BD.

However, over the last 20 years, startling trends are beginning to emerge that are causing researchers to conclude that BD is not something that only women experience. For example, the prevalence of diagnosed male eating disorders appears to be on the rise (Gadalla, 2009). Additionally, steroid and supplement use for the purpose of improving appearance and/or strength has increased dramatically and is associated with weight preoccupation, BD, and poorer health related attitudes among men (Smolak, Murnen, & Thompson, 2005). These startling trends have forced researchers and practitioners to investigate and understand how men evaluate their bodies. Nevertheless, despite the initial research barriers, recent explorations into men's BD have revealed important findings for the psychological study, treatment, and prevention of men's body image

concerns. Before summarizing this research, an operational definition of body image will be provided.

Defining men's body image. Body image is a broad construct comprising multiple components. Among these components are perceptions, attitudes, feelings, and behaviors that men have toward their bodies (Cash, 2004). Thus, body image can be operationally defined as the way a man thinks, feels, and behaves in relation to his physical appearance (Muth & Cash, 1997). In providing an integrative cognitive-behavioral viewpoint of body image, Cash (2002) discerned that there is a reciprocal interaction that occurs between external environmental events, intrapersonal factors, and individual behavior, which impacts men's attitudes toward their bodies.

Cash (2002) postulated that men's body image attitudes are contingent on two constructs. First, *body image evaluation* is a man's perception of his body size and composition, affective response to his body, and beliefs about his level of attractiveness. Therefore, if a man's body image evaluation is significantly different from the ideal body type, he will likely engage in *body image investment*, which includes both healthy and unhealthy (e.g., weight lifting, supplement use, tanning, shaving, binging, restricting) behaviors in order to improve the way he views his body.

When examining how body image attitudes are created and maintained, Cash (2002) ascertained distinct historical and developmental influences that impact the way a man feels about his physical appearance as he is physically, cognitively, socially, and emotionally developing (Cash, 2002). Foremost, within each culture, there are specific messages that are conveyed as to what physical characteristics are desirable/valued and which ones are not. According to Cash (2002), "cultural messages not only articulate and

reinforce normative notions about physical attractiveness and unattractiveness, but they also express gender-based expectations, tying “femininity” and “masculinity” to certain physical attributes” (p. 40-41). For adolescent boys and men living in the United States, a muscular ideal is perpetuated as desirable which causes men to strive to become bigger, faster, and stronger.

Muscular ideal and drive for muscularity. Since sociocultural messages and representations of the ideal male body have become more visible throughout the years, boys and men are beginning to elicit judgments towards their bodies as it pertains to how they measure up to the ideal body type. For boys and men, the ideal body type consists of large biceps, triceps, and chest, chiseled abdominal muscles, and a V-shaped upper body (Chrisler & Cochran, 2007). Research has shown that a majority of men living in the United States attribute positive characteristics toward men who have lean and muscular bodies and negative characteristics for those who do not represent this ideal (Grogan & Richards, 2002).

This muscular ideal receives global attention, and men who internalize this ideal body image may experience BD at physical, psychological, and emotional levels if they do not measure up (Grieve, Truba, & Bowersox, 2009). Although most men adhere to the muscular ideal, Ridgeway and Tylka (2005) discovered that there is a limit to muscle size. In a qualitative design, 30 college-aged men were interviewed to understand men’s perception of the ideal body. The researchers found that most of the participants identified contemporary professional bodybuilders as too large. Yet, in another qualitative study, participants perceived that a muscular body communicates strength, confidence, and financial success (Adams, Turner, & Bucks, 2005). Consequently, just as

the thin ideal is attached to feminine ideals and values, the muscular ideal is connected to social conceptions of masculinity and becomes a social symbol for masculine embodiment and lifestyle (Ricciardelli, Clow, & White, 2010).

Interestingly, there is a gender difference between what is attractive and desirable as it pertains to the male body. For example, previous research has independently measured the degree of muscularity that men thought women found to be attractive and women's actual preferences for male muscularity (Olivardia, et al., 2004). Results indicated that men overestimated and desired a level of muscularity greater than the level actually found attractive by women. Furthermore, Frederick, Fessler, and Haselton (2005) examined various issues of *Cosmopolitan* (published from 2002-2004), *Men's Health* (2001-2004), *Men's Fitness* (2002-2004), and *Muscle & Fitness* (2002-2004) magazines, investigated the covers and rated the muscularity level of all images. Frederick et al. (2005) found that magazines geared toward female audiences present representations of the ideal male body as less muscular than magazines that are more oriented toward male audiences. Finally, Olivardia et al. (2004) found that men perceive women to find more muscular men desirable despite women reporting that they found extremely muscular men unattractive (Pope, et al., 2000).

In summary, there seems to be a discrepancy between what women find attractive in men and what men think women find attractive. However, men continue to believe that becoming bigger, faster, and stronger is desirable and admirable. This pursuit of achieving the ideal male body is termed a drive for muscularity. This drive for muscularity is causing many men in the United States to become dissatisfied with their bodies, and is impacting their physical, psychological, and emotional health. However,

many men continue to engage in this behavior and the literature has presented salient theories as to why men continue this pursuit. These theories will be summarized in the following paragraphs.

Evolutionary theory of muscularity. When attempting to understand why young boys and men engage in a pursuit of obtaining the ideal male body type, researchers have hypothesized various theories. Jackson (2002) purported that there was an evolutionary component to explain why men were driven to become bigger, faster, and stronger. According to the evolutionary theory of muscularity, having a broad chest and a muscular physique indicated durability and was considered to be more attractive to the opposite sex compared to men who did not have muscular physiques. Therefore, men who were not muscular had lower chances of procreating and passing down their genes to ensure survival.

Particularly, muscularity was associated with protection and food production. Foremost, women were more apt in choosing a sexual partner who was more muscular because it would ensure protection of both the mother and the children. Thus, in order to fight off predators and keep one's offspring safe, men needed to be physically strong and muscular. Second, in order to hunt and gather food resources, men needed to be in top physical shape to ensure that their offspring were provided with the essential nutrients and nourishment in order to develop. In summary, providing protection and food resources to one's offspring increased the chances of survival, which would then potentially lead to further procreation on the part of men's offspring and passing along the family genes to the next generation. However, it would be a shortcoming to only elucidate men's drive for muscularity through an evolutionary lens. Therefore, the

following sections will include social comparison theory, sociocultural theory, and threatened masculinity theory.

Social comparison theory. First developed as a way of explaining how individuals internalize socially constructed body ideals, social comparison theory purports that men, like women, engage in a continuous self-evaluative process because it allows them to develop a consistent impression of themselves in relation to others (Festinger, 1954). The theory further discerns that at times, men may become uncertain about a specific bodily attribute and will compare their attribute to that of others in order to clarify how they compare on the attribute in question. Research has shown that like women, men also engage in social comparison processes in order to define their attractiveness or worthiness, and this has been shown to lead to increased levels of BD (e.g., Frith & Gleeson, 2004; Hobza, Walker, Yakushko, & Peugh, 2007; Karazsia & Crowther, 2009; Myers & Crowther, 2009).

To understand with which target group's men engage in the most comparison, Heinberg and Thompson (1992) had male and female undergraduate students rate with which social groups (e.g., celebrities, other students, classmates, friends, family) they compare their physical attributes (e.g., figure/physique, intelligence). The authors found that family members were the least likely target comparison group for men and women, while friends were the most common comparison group. However, research has shown that both family and peers have a significant impact on the development of boy's muscle dissatisfaction as they progress through their development. For example, fathers, in particular, have a strong influence in the development of a child's body image along with pressure for their sons to increase muscle (McCabe & Ricciardelli, 2003). Moreover,

McCabe, Ricciardelli, and Finemore (2002) found that boys who have lower body mass indexes are often pushed by their peers to increase the size of their muscles in order to gain group acceptance, earn respect, and become popular.

In summary, researchers have articulated that men do engage in comparing themselves to idealized images and are influenced by their peers and family members to conform to the mesomorphic ideal. From these experiences, young men develop BD, endorse a drive for muscularity, and engage in unhealthy behaviors in order to achieve the muscular ideal (e.g., Cash, 2008; Hargreaves & Tiggemann, 2009; Heinberg & Thompson, 1992; Jonason, Kremar, & Sohn, 2009). However, in order to understand how body comparison occurs within men, it is important to consider where idealized images emerge.

Sociocultural theory. According to Thompson, Heinberg, Altabe, and Tantleff-Dunn (1999), sociocultural theory purports that each specific culture produces and reinforces various physical characteristics that are deemed desirable, advantageous, and privileged for both men and women. Over the last century, the ideal male body in the United States has changed significantly. Before the 1980s, men were less concerned about their physical appearance (e.g., Luciano, 2001; Thompson & Cafri, 2007); however, over the last 30 years, the United States has witnessed a cultural change as it pertains to the ideal body for men. For example, the ideal male body has significantly become more muscular, lean, and unattainable over time (Pope, Olivardia, Gruber, & Borowiecki, 1999). Consequently, these ideals have impacted the physical, psychological, and emotional health of men (e.g., Grieve & Helmick, 2008; Parent, 2013).

Moreover, sociocultural theory emphasizes the role the media plays in both the creation and maintenance of culturally ascribed beauty ideals. McCreary and Sasse (2000) discerned that the media's focus on the muscular ideal plays a central role in the increase in drive for muscularity among men living in the United States. Particularity, media cultivation theory (Grubner & Gross, 1976) posits that media is a major source of reflecting and reinforcing cultural ideals, and impacts the thoughts and behaviors of viewers. While women tend to be presented in the media as thin, weak, and vulnerable, men are portrayed as muscular, strong, and powerful.

Males are currently bombarded with the culture's stereotypical images of physical attractiveness from magazines, television, films, books, video games, and action figures. The increased exposure to unrealistic male body types has resulted in men becoming more sensitive and conscious about their own bodies (Agliata & Tantleff-Dunn, 2004). Currently, the media saturates viewers with various depictions of the muscular ideal male body type and male viewers begin to interpret the ideal body type as the cultural norm and anything else is considered to be abnormal (Farquhar & Wasylikiw, 2007). Therefore, after years of being exposed, research has demonstrated that men experience higher levels of depression, anger, body dissatisfaction, and muscle dissatisfaction, while developing lower levels of self-esteem (e.g., Agliata & Tantleff-Dunn, 2004; Baird & Grieve, 2006; Bartlett et al., 2008; Bartlett & Harris, 2008; Farquhar & Wasylikiw, 2007; Hausenblas, Janelle, Gardner, & Hagan, 2003; Hatoum, & Belle, 2004; Lorenzen, Grieve, & Thomas, 2004) because they believe the ideal body type is the norm and attainable, yet their own bodies do not conform to these idealized standards.

For example, Hargreaves and Tiggemann (2009) integrated social comparison theory and sociocultural theory by employing a research design to measure body satisfaction among college-aged men. Particularly, the authors separated their sample into four different groups through the implementation of a 2 x 2 between subjects experimental design. Half of the participants were exposed to various commercials containing images of men who epitomize the mesomorphic ideal versus commercials that did not. Also, half of the participants were asked to rate each commercial according to how attractive the men were compared to themselves. The authors found that compared to the sample that viewed nonappearance commercials, those who watched the muscular-ideal commercials demonstrated greater levels of muscle dissatisfaction and lower levels of physical attractiveness. However, the amount of social comparison elicited did not have a significant difference pertaining to the participants' body dissatisfaction.

Furthermore, Arbour and Martin Ginis (2006) examined the effects of exposure to muscular and hypermuscular media images on body image and muscle dissatisfaction among college aged and adult men. In the study, the researchers had participants completed measures pertaining to body dissatisfaction and muscle dissatisfaction and then invited all participants to participate in a seminar pertaining to nutrition and exercise. However, the participants were randomly assigned to two different conditions. In the first condition, participants were shown pictures of hypermuscular men throughout the duration of the seminar, whereas the second condition showed pictures of muscular men. After participating in the seminar, the men were asked to complete the same measures. The authors found that men who had higher levels of baseline muscularity dissatisfaction reported greater post-exposure body dissatisfaction, but only for those that

viewed the masculine images. These results support the media cultivation theory in that the muscular images were representative of images that men see every day in magazines and commercials. Therefore, men view those images as the norm and when they evaluate their bodies, they realize they do not have a similar physique, thus experiencing muscle and body dissatisfaction. Alternatively, men who were exposed to hypermasculine images were able to discern that those images are often found in body building magazines, do not represent the ideal body type, and were less likely compare their bodies and less likely to experience higher levels of muscle and body distress.

Moreover, the media cultivation theory posits that young boys and men are continually being exposed to images of male bodies that are increasingly becoming bigger. For example, Leit et al. (2000) demonstrated that cultural ideals of the male body, as illustrated by magazine models, significantly changed over the course of 25 years. Particularly, the authors examined numerous centerfold models in *Playgirl* and found that the models' bodies became more muscular over time. Furthermore, Labre (2005) completed a content analysis in which samples of *Men's Health* and *Men's Fitness* magazines were analyzed and coded over a period of four years. Primarily, the author found that most images in both magazines depicted men with low body fat and increased levels of muscularity. Additionally, the author concluded that most of the advertisements and messages depicted in the magazines focused on men achieving muscularity and leanness over health, fitness, and happiness.

Additionally, action figures have also provided an index of evolving American cultural ideals of male body image. Particularly, Pope, et al. (1999) obtained examples of the most popular American action toys manufactured since the 1970s (e.g., G. I. Joe, Star

Wars figures, popular action figures), and measured the waist, chest, and bicep circumference of each figure, scaling those measurements to the height of an actual man. The researchers found that figures have grown much more muscular over time, with some recent figures far exceeding the muscularity of the largest professional body builders. By becoming the consumers of ideal body image through media messages and socializing with unattainable proportions in action figures, young boys and adult men start to internalize the muscular ideal, experience muscle dissatisfaction when their bodies do not measure up, develop a drive for muscularity, and engage in problematic behaviors (explained later).

Finally, pornographic material is distributed through the use of various mediums (e.g., Internet, DVDs, magazines) and continuously disseminate images of male bodies that adhere to the cultural mesomorphic ideal. Unfortunately, these images have been shown to have detrimental effects for men. For example, Tylka (2015) added to the limited literature pertaining to men's body image by examining the links between viewing pornography, muscle dissatisfaction, body fat dissatisfaction, and levels of body appreciation among college-aged men. Overall, the author found that the frequency of men's pornography consumption was positively linked to increased levels of muscle dissatisfaction as well as increased levels of body fat dissatisfaction. Particularly, these findings were partially mediated by men's internalization of the mesomorphic ideal. Moreover, pornography consumption was positively linked to negative affect and negatively linked to positive affect. Finally, the author found that men's pornography consumption was negatively linked to body appreciation. In summary, although more research needs to be conducted, Tylka (2015) identified the detrimental psychological

consequences of viewing pornography in which the mesomorphic body ideal is perpetuated.

In conclusion, young boys and men are continuously bombarded with images depicting the ideal male body type through the form of magazines, movies, the Internet, and books. Unfortunately, research has demonstrated that viewing these images negatively impacts levels of body image and muscle satisfaction among men, which then leads men to develop a drive for muscularity. However, the media is not the only perpetrator in reinforcing body ideals as it pertains to men. Particularly, gender socialization, a significant sociocultural influence, will be summarized.

Threatened masculinity theory. Threatened masculinity theory posits that threats to masculinity in one's environment result in increased muscle dissatisfaction and increased levels of drive for muscularity (Mishkind, Rodin, Silberstein, & Striegel-Moore, 1987). For example, Luciano (2007) summarizes how the cultural expression of masculinity through work has seen significant changes. In the late 1800s to early 1900s, men tended to work strenuous jobs that involved difficult physical labor and were able to display masculine traits centered on ruggedness, toughness, and power. Through the years, as the middle class began to emerge, families started to move more to urban environments resulting in men's bodies becoming less the focus of work (Luciano, 2007). Furthermore, with the advancement of gender equality within the United States, the traditional male role as breadwinner and provider has come into conflict with women's empowerment (Kimmel, 2003). Through the years, women have increasingly entered into and have successfully competed with men in the workplace and as a result, women have become less dependent on men for financial security and power (Bordo, 1999).

Consequently, men in today's society can no longer rely on the role of financial provider as a way to exert masculinity and they are less likely to be employed in positions that emulate traditional masculine ideologies. Therefore, in an attempt to maintain a sense of masculinity, it has been hypothesized that many men may focus on the development of muscularity (Gray & Ginsberg, 2007). For example, McCreary et al. (2005) conducted a study to better understand the relationship between the drive for muscularity and gender-typed traits and behaviors among college-aged men and women. In the first study, the authors had both men and women complete a series of questionnaires pertaining to drive for muscularity and gender-typed personality traits. The authors found that compared to women, men scored higher on the drive for muscularity scale after the authors controlled for gender-typed personality traits. Second, the authors found that a majority of the male-typed gender-role traits and behaviors were positively associated with the drive for muscularity. Finally, the authors did not find a significant association between drive for muscularity scores and feminine-typed traits and behaviors. Interestingly, the findings from the first study demonstrate that there is a significant association between self-perceptions of masculinity and muscularity.

Moreover, Gattario et al. (2015) examined the relationship between masculinity and men's body image among college-aged students from the United States, United Kingdom, Australia, and Sweden. Particularly, the authors found that there was a significant link between men's conformity to traditional masculine norms and drive for muscularity, leanness, and fitness in all four countries, explaining almost 30% of the variance. However, the authors found that compared to the other three countries, college-

aged men from the United States displayed the highest levels of conformity to traditional masculine norms as well as drive for muscularity.

In summary, it has been noted that for many men living in the United States, those who are not able to obtain a muscular and lean physique are often considered to be less masculine compared to men who are able to obtain the cultural body ideal (Grogan & Richards, 2002). However, researchers have also examined how GRC impacts one's drive for muscularity. Therefore, the following section will illuminate the relationship between these two constructs.

GRC and drive for muscularity. Recently, researchers are beginning to examine the relationships between GRC, body image, and drive for muscularity among men and the results have been mixed. For example, in their second study, McCreary et al. (2005) examined college-aged men's levels of GRC, drive for muscularity, and their traditional attitudes about what it means to be a man. The authors found that men who held more traditional views about what it meant to be a man: (a) wanted to be more muscular; (b) experienced higher levels of GRC; (c) and were more apt to endorse difficulty in maintaining a work/life balance.

However, Hobza and Rochlen (2009) found a different result when investigating the relationship between GRC, drive for muscularity, exposure to media images of the body ideal, and body esteem among college aged men. Although the authors found that men who viewed advertisements depicting men with the ideal body type endorsed lower levels of body esteem compared to men who did not view those images, they also found that GRC and drive for muscularity did not moderate the relationship between these two variables. The authors proposed possibilities as to why GRC and drive for muscularity

did not serve as moderators. Primarily, the authors proposed that the moderator effect for drive for muscularity was not established due to their small sample size. Moreover, the authors incorporated previous research (i.e., Schwartz & Tylka, 2008) noting that entitlement served as a moderator and mediator on the relationship between GRC and body esteem. Particularly, various forms of entitlement serve as protective men against the negative effects of GRC on body esteem.

Moreover, Murray and Lewis' (2014) employed a study in order to determine how BD differs across age groups while also examining the moderating role of age on GRC and BD. Findings suggest that across all age groups (young men, aged 17-29; middle-aged men, aged 30-49; and older men, aged 50-71), GRC was a significant predictor of muscle and body fat dissatisfaction. However, the authors found that age moderated the relationship between GRC and muscle and body fat dissatisfaction. In particular, increased levels of GRC among middle-aged and older men led to increases in muscle and body-fat dissatisfaction. Conversely, muscle and body-fat dissatisfaction among younger men was not significantly different at various levels of GRC. The authors hypothesized that older and middle-aged men who adhered to the traditional gender roles are more vulnerable to increased levels of dissatisfaction.

In summary, although the results are mixed, it is important for researchers to continue to examine the relationship between conformity to masculine norms, GRC, body image, and drive for muscularity. This is important because men are increasingly experiencing a variety of body image concerns with the four aforementioned constructs earlier cited as significant contributors to the onset of men's BD. Unfortunately, men who experience BD endure a multitude of physical, psychological, and social consequences

(Brennan, Lalonde, & Bain, 2010). Therefore, it is important to provide an overview of some of the salient consequences to BD that men experience.

Consequences of men's BD and drive for muscularity.

The large discrepancy between one's current body and the ideal body can lead many young boys and men to feel dissatisfied with their current body type, endorse a drive for muscularity and begin a journey in order to become bigger and stronger. However, in pursuit of this muscular ideal, many engage in behaviors that are detrimental to their physical, psychological, and emotional health. In the following section, some of the most prominent consequences of men's BD will be reviewed.

Excessive exercising and dieting. Currently, many men are engaging in excessive exercise practices not to maintain health, but to build muscle in pursuits of obtaining the muscular ideal. It has been noted that the bodybuilding subculture has significantly influenced men's health and exercise behaviors. Particularly, within this community, the representation of power, vitality, and health is emphasized and body objectification, tanning, and body depilation (removal of body hair) have become more acceptable practices among non-bodybuilders (Klein, 1993). Interestingly, Klein (2007) discerned that there has been an exponential rise (25% in the last 15 years) in gym memberships in which men are initiated into a culture that values the pursuit of becoming bigger, faster, and stronger. Coupled with these changes is an influx of popular men's magazines, in which numerous articles on the best workout routines to conduct in order to get the mesomorphic physique are emphasized. Furthermore, in these same magazines, a plethora of hypermasculine men are shown endorsing diet programs, supplements, and weight lifting equipment (Luciano, 2007). These images often depict men that are tan,

have big biceps and triceps, have a lean V-shaped waist, along with tight abdominal muscles. In summary, being bombarded with such advertising, more men are signing up for gym memberships in order engage in excessive exercise practices to obtain a similar physique.

Hausenblas and Downs (2002) were one of the first researchers to operationally define exercise dependence. According to these researchers, excessive exercise occurs when behaviors become maladaptive and lead to significant impairment or distress. Also, as is similar to substance dependence, Hausenblas and Downs (2002) articulated that at least three symptoms (i.e., tolerance, withdrawal, loss of control, increased time, conflict with other activities, continuance of behavior when injured) must be present to fit the definition of excessive exercise. In recent years, the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*; American Psychiatric Association, 2013), articulated that exercise is considered to be excessive when “it significantly interferes with important activities, when it occurs at inappropriate times or in inappropriate settings, or when the individual continues to exercise despite injury or other medical complications” (p. 346). Also, Costin (2007) purports that people who are independent, perfectionistic, and oriented to achieve are those who are most likely to engage in behaviors indicative of compulsive exercising. Cumulatively, understanding the distinct personality qualities that facilitate excessive exercise behaviors, researchers have hypothesized that college campuses would not be immune to this epidemic (Garmen, Hayduk, Crider and Hodel, 2004).

Particularly, Garmen et al. (2004) found that approximately 21% of their college sample, not including athletes in season, met criteria (i.e., exercised over six hours per

week while endorsing having experienced negative consequences due to their behavior) for exercise dependence. Interestingly, the authors did not find significant gender differences, indicating that men are at the same risk for engaging in these behaviors as women. Finally, the authors found that college students who were exercise dependent endorsed numerous negative consequences pertaining to their overall well-being as a result of their exercise behaviors, including the disruption of: (a) romantic and non-romantic relationships; (b) vocational or academic obligations; (c) extracurricular activities; and (d) other daily activities (Pope et al., 2000). Finally, compulsive exercisers continually put themselves at risk for a wide array of physical ailments including muscle strains and tears, cartilage damage, stress fractures, and other injuries (Costin, 2007).

Coupled with excessive exercise behaviors, college-aged men are turning to bodybuilding magazines in order to review articles pertaining to nutritional advice when building muscle in an attempt to obtain the mesomorphic ideal. For example, Alexander (2004) encourages readers to intake at least 30 grams of protein approximately five or six times per day in order to increase muscle mass. Furthermore, it has been noted that male athletes, bodybuilders, and weight lifters who are trying to increase muscle mass while decreasing body fat, will pair rigorous workout routines with a popular dieting practice called anabolic-catabolic cycling (Weider & Reynolds, 1983). In the anabolic phase, men consume large amounts of food while taking dietary supplements in order to accrue body mass. This high calorie intake results in muscle growth as well as an increase in body fat tissue. Therefore, in order to trim down and lean up, men will engage in the catabolic phase where they significantly limit their caloric intake.

Startlingly, approximately 17% of college-aged men engage in low fat/high

protein diets for the sole purpose of increasing muscle mass (Cafri et al., 2005). With so many men on college campuses engaging in these practices, various physical and psychological problems may emerge. From a psychological standpoint, Olivardia (2001) found that men would forego various social and occupational endeavors in order to comply with their strict dietary regimens. This leaves many men feeling socially isolated, which may cause other mental health problems. From a physical standpoint, men who diet to lose weight experience a slowed metabolism and are more prone to gain weight and develop obesity (Stice, Cameron, Killen, Hayward, & Taylor, 1999). Furthermore, men who engage in these strict dieting practices are at risk for changes in renal functioning, blood pressure, and heart disease (Brownell, Steen, & Wilmore, 1987).

Eating disorders. A second significant consequence to men's BD and drive for muscularity includes eating disorder symptomology. Although research has shown that men tend to experience eating disorders at rates significantly lower than women (10% men, 20% women; Wade, Keski-Rahkonen, & Hudson, 2011) there are some indications that eating disorders may be increasing among men (e.g., Gueguen et al., 2012; Harvey & Robinson, 2003; Weltzin, Cornella-Carlson, Fitzpatrick, Kennington, Bean, & Jefferies, 2014). Particularly, O'Dea and Abraham (2002) found 20% of the college men in their sample displayed characteristics of an eating disorder and 33% endorsed significant exercise concerns (e.g., exercise sessions in which more than 600 calories were burned with non-athletes and more than 1,100 calories among athletes). Moreover, binge eating disorder (BED), a condition now recognized in the DSM-5, is of particular concern for men, affecting 5.4 million men in the United States. Predominantly, BED behaviors include: (a) recurrent episodes in which an individual consumes an amount of food that is

larger than what most people would eat within a two-hour period of time; (b) with a sense of lack of control over eating during the episode (American Psychiatric Association, 2013). Moreover, research has shown that behaviors of bingeing, vomiting, and anxiety eating are similar between men and women (Sharp, Clark, Dunan, Blackwood, & Shapiro, 1994).

However, there are some significant gender differences pertaining to eating disorders.

First, in comparison to women, men with eating disorders are more likely to have a history of obesity (Costin, 2007). Second, there is a significant gender difference in the age of onset for eating disorders as men tend to develop them at age 21, compared to women who are between the ages of 13-18 years old at onset (Harvey & Robinson, 2003). Furthermore, while comparing the clinical presentation of eating disorders among men and women, Bramon-Bosch, Troop, and Treasure (2000) found that men with eating disorders were most likely to have a comorbid disorder and were more likely to endorse suicidal behaviors compared to women.

Unfortunately, numerous researchers and clinicians have noted that mental health professionals and mental health institutions tend to minimize men's eating disordered behaviors (e.g., Costin, 2007; Pope et al., 2000). Particularly, due to gender role socialization, many men are reticent to seeking counseling services pertaining to their eating concerns and O'Dea and Abraham (2002) found that upon first meeting with a psychiatrist or psychologist, men often deny their BD or do not understand the seriousness of their symptoms. Furthermore, most clinicians often mistake men's binge behaviors as being a typical male hearty appetite (Corson & Andersen, 2002).

Consequently, men's symptoms often go unrecognized and under-diagnosed (Burlew & Shurts, 2013).

Muscle enhancement substances. Furthermore, in the attempt of obtaining a lean and muscular body, many men resort to using various muscle enhancement substances, thus putting their physical and mental health in jeopardy. Most notably, researchers have reported that illicit anabolic-androgenic steroids (AAS) have become a prevalent problem among adolescent boys and men, with a lifetime estimated prevalence rate of one million Americans (Kanayama, Pope, Cohane, & Hudson, 2003). Among those, at least 77% of bodybuilders and one in every 25 high school students have either used or continue to use steroids (e.g., Blouin & Goldfield, 1995; Goldberg & Elliot, 2007). However, Kanayama, Brower, Wood, Hudson, and Pope (2009) have discerned that a majority of users do not begin until their early 20s. Therefore, the lifetime prevalence of AAS use among college-aged men is much greater compared to teenagers.

AAS are synthetic derivatives of testosterone, the natural male hormone responsible for the masculinizing (androgenic) and tissue-building (anabolic) effects during male puberty (Bahrke, 2007). Athletes, body-builders, and those desiring to bulk up began to use AAS in the 1980s as a result of the increasing Western cultural emphasis on male body image and muscularity (Pope et al., 2000). This trend has continued despite numerous legislative (e.g., One Hundred Eighth United States Congress, 2004) and educational (e.g., National Institutes on Drug Abuse, 2000) attempts to control AAS use. Unfortunately, AAS use continues to be a problem in the United States as it can be easily accessible and purchasable over the Internet from other countries where AAS is still legal.

While abusing AAS, men will become addicted and may experience a plateauing effect, in which men will have to inject higher dosages in order to get the same effect because the dosage that was previously effective loses its potency (Morgan, 2008). Moreover, while taking AAS, the body will stop producing testosterone and men will experience negative consequences and significant adverse medical effects that impact the health and wellness of male users. For example, from a physiological perspective, AAS use increases the risk of body acne, shrinkage of testicles, gynecomastia, coronary artery disease, stroke, myocardial infarction, cardiomyopathy, and liver disease (Cafri et al., 2005). Behaviorally, AAS use has been shown to lead to increased levels of hostility, increased risk of suicidality, decreased levels of energy, decreased sexual desire, decreased appetite, and increased risk of homicidal tendencies (Cafri et al., 2005; Pope & Katz, 1990). From a psychological perspective, it has been discerned that AAS use can cause negative mood changes (e.g., mania, aggression, depression) while also causing cognitive impairments to attention and memory (Cafri et al., 2005). Also, from an interpersonal perspective, male weight lifters who were using AAS reported higher levels of dysfunction as it pertained to their relationships and had higher levels of conduct disorder when children compared to non-AAS weight lifters (Kanayama, et al., 2003). Finally, AAS use can develop into body checking behaviors and psychological dependence due to a fear of losing substantial gains in musculature and a reluctance to cease use in spite of negative health consequences (Cafri et al., 2005).

In summary, there are various detrimental consequences to using muscle enhancement substances. However, what happens when men gain muscle through excessive exercise and muscle enhancements, but do not believe they are muscular

enough when they look in the mirror? In the following section, muscle dysmorphia among men will be evaluated.

Muscle Dysmorphia among Men

Conceptualization and prevalence. In 1997, the term *muscle dysmorphia* (MD) was coined for a form of body dysmorphic disorder (BDD; Olivardia, 2001).

Traditionally, individuals with BDD believe that a specific body part (e.g., face, skin) is defective or inadequate, even though family and friends think otherwise. Consequently, individuals may spend hours each day looking in the mirror, inspecting their appearance and attempting to hide their perceived defect (DSM-5). They will go to great lengths to make sure that their “defect” remains covered and they experience negative consequences for doing so (e.g., avoid going out with friends).

According to Morgan (2008), MD, previously referred to as “bigorexia” or “reverse anorexia,” is a collection of attitudes and behaviors that are characteristic of an extreme desire to gain body mass. Attitudes include a significant disdain for one’s current body shape coupled with a strong desire to change it by increasing muscle mass. Second, an individual will engage in various behaviors (e.g., excessive weight lifting, eating high protein meals in large quantities, use weight supplements as well as AAS) in order to obtain an ideal body shape. Unfortunately, after engaging in these behaviors, individuals do not believe they have made progress although they may be more muscular than most friends and colleagues. Therefore, they become significantly distressed, and continue to lift weights, diet, and use AAS despite the aforementioned adverse physical and psychological consequences.

Also, due to their desire to maintain a strict exercise and nutrition schedule,

individuals with MD sacrifice other important social, recreational, or occupational endeavors, thus causing strain within their romantic and interpersonal relationships (Morgan, 2008). Moreover, they will avoid situations (e.g., going to the beach) where their body is exposed to others, or endure such situations only with marked distress or anxiety (Murray, Reiger, Touz & Garza, 2010). Additionally, men with MD will engage in body checking behaviors (i.e. frequent weighing, checking specific body parts in mirrors, asking others opinions about how the body looks, checking the fit of clothing worn) and research has shown that this is a significant predictor of MD. For example, Walker, Anderson, and Hildebrandt (2009) examined the relationship between body checking behaviors and a myriad of outcome variables (i.e., mood, MD, salience of shape and weight, performance enhancement substance use). The authors found that body checking behaviors were correlated with all outcome variables, predicted performance enhancement substance use, and accounted for the largest amount of variance in MD. Finally, men with MD will compare their bodies to other men in order to assess their level of muscularity (Olivardia, 2001).

In the United States, the prevalence rate for MD is unknown but it is estimated that up to 100,000 men suffer from severe forms of the disorder (Pope et al., 2000). Moreover, 10% of weight lifters are estimated to suffer from MD, as well as 9% of those with BDD (Olivardia, 2001; and Pope & Katz, 1994). However, it is not clear how common this disorder is in the general population, particularly among college-aged men (Grieve, 2007). Yet, there is evidence that college-aged men are at a critical stage of development that could put them at risk for having an unhealthy obsession with body image issues, potentially leading to MD.

Evidence demonstrates that there is an increase in college-aged men presenting to college counseling centers with low self-esteem, appearance concerns, and abnormal eating and exercising behaviors (Morgan, 2002). Furthermore, research indicates that 95% of college men report dissatisfaction with some aspect of their bodies (Labre, 2002). Spitzer, Henderson, and Zivian (1999) reported that an inclination toward a lean and muscular body begins at six or seven years of age, continues throughout adolescence, and reaches a pinnacle in the emerging adulthood time period. Furthermore, Olivardia, Pope, and Hudson (2000) found that the average age for the onset of MD was 19.4 years. Therefore, future research is critical in examining the onset, treatment, and prevention of MD among college-aged men.

Challenges in conceptualizing MD. Over the years, there has been contention in the conceptualization of MD. As previously noted, some scholars have conceptualized MD as a form of BDD. However, critics have argued that MD has very little in common with the clinical presentation of BDD or other somatoform disorders due to the emphasis on cultural influences (Chung, 2001). Particularly, critics have contended that MD is more similar to eating disorders than to BDD (Grieve, 2007; Murray et. al., 2010). For example, Hallsworth, Wade, and Tiggemann (2005) collected data among bodybuilders, weight lifters, and a control group of non-athletes and concluded that the drive for muscularity was highly correlated with bulimic symptoms. However, critics of these findings purported that the authors' internal consistency reliability was low for the scale measuring bulimic symptomology. Therefore, critics concluded that measurement error existed, participants may not have completely understood the various measures they were asked to complete, thus making the findings suspect. Therefore, over the past 10 years,

researchers have arduously examined the relationships among symptoms of MD and variables most relevant to a DSM classification.

Prominently, Maida and Lee Armstrong (2005) found that there was no relationship between MD and measures of somatoform disorders or eating disorders. However, the authors found that BDD, obsessive-compulsive disorders (OCD), body dissatisfaction, and hostility were main predictors of MD. Moreover, Pope, Pope, Menard, Fay, Olivardia, and Phillips (2005) examined the histories of 63 men with BDD. Particularly, within the sample, the authors were interested in comparing men who endorsed a history of MD compared to those who did not. The authors found that men with BDD plus MD were similar to those with BDD but not MD on many BDD related variables. However, the men with BDD plus MD were more likely to engage in several compulsive behaviors. Therefore, due to research results such as the aforementioned, MD is now included as a specifier of BDD and is classified under the obsessive compulsive and related disorders section of the DSM-5 (DSM-5).

Contributing factors of MD. In an attempt to understand the causes of MD, Grieve (2007) articulated a conceptual model discerning various factors that contribute to the onset of MD. Particularly, Grieve (2007) articulated various socio-environmental (e.g., media influences, sports participation), emotional (e.g., negative affect, aggression, anger), psychological (e.g., body dissatisfaction, low self-esteem, body distortion, perfectionism), and physiological factors (e.g., body mass) in understanding the onset of MD in men. Although the various socio-environmental factors have already been summarized in the drive for muscularity section of this Chapter, the following sections will elucidate the various psychological and emotional factors of MD among men.

Although the MD literature is sparse, there is research suggesting that psychological factors play an immense role in the onset of MD. For example, Olivardia et al. (2004) examined the relationships between body image, depression, eating pathology, use of performance-enhancing substances, and self-esteem among college-aged men. Overall, the authors found that a majority of their sample disclosed a high degree of body dissatisfaction, which was closely related with depression, eating pathology, use of performance-enhancing substances, and lower levels of self-esteem. Moreover, the authors found that men with lower levels of self-esteem endorsed higher levels of MD. It has been discerned by Crocker (2002) that men with lower levels of self-esteem experience higher levels of MD because many there are a subgroup of men whose self-efficacy is dependent upon their physical appearance. Therefore, if a man believes that he is not measuring up to the muscular ideal, he will become dissatisfied with his body, experience lower levels of self-esteem and will engage in MD behaviors in order to improve his self and body esteem.

Moreover, there is increasing evidence to suggest that childhood victimization in the form of being bullied by peers is related to MD behaviors. Particularly, research has shown that many boys are bullied when they are younger because of their perceived physical characteristics (i.e., looking physically weak, being overweight, lacking assertiveness, being anxious; Griffiths, Wolke, Page, Horwood, & Team, 2006). For example, Wolke and Sapouna (2008) investigated the relationship between childhood bullying victimization experiences with MD and mental health problems among a sample of male body-builders with a mean age of 29 years old. Overall, the authors found that male bodybuilders in their sample who were embarrassed about their current physique,

because they believed it to be muscular, experienced lower levels of self-esteem and higher levels of global psychopathology (i.e., the integration of depression, anxiety, and obsessive-compulsive behaviors). Moreover, the authors found that participants who endorsed experiencing victimization during childhood in the form of bullying endorsed higher levels of global psychopathology. Finally, men who were victims of bullying in childhood were more likely to endorse higher levels of MD behaviors compared to men who did not report such experiences. Overall the findings suggest that childhood physical victimization by peers may be a significant contributing factor in the development of MD behaviors among those who engage in bodybuilding.

Pertaining to peer socialization experiences, researchers have found significant relationships between comments that others make about one's body and the onset of MD. For example, using a sample of college men, Menees, Grieve, Mienaltowski, and Pope (2013) examined the relationship between critical comments that other people have made about one's body and his current levels of MD behaviors. Although the authors did not find significant differences on MD behaviors between the men who were able to recall negative comments and those who did not, the authors found a significant relationship between the severity level of the comment and MD symptoms. Particularly, the more severe or threatening that a particular comment was, the greater the man's level of MD symptomology thus providing contrary evidence to the old nursery rhyme "sticks and stones may break my bones but words will never hurt me." Finally, the authors found that men who associated the negative comments about their bodies with feeling more negative emotions at the time reported more MD symptoms.

Furthermore, in an attempt to validate Grieve's (2007) model of contributing

factors of MD, Grieve and Helmlick (2008) examined the influence of self-objectification on drive for muscularity and MD behaviors among college men. Particularly, self-objectification theory (Fredrickson and Roberts, 1997) discerns that the media objectifies both men and women by placing emphasis on physical appearance. For women, the pressure is to be thin and for men, to be muscular. Consequently, continual exposure to these images result in both men and women valuing themselves based solely on their appearance, resulting in body dissatisfaction. Grieve and Helmlick (2008) found that men who scored higher on self-objectification measures endorsed a stronger drive for muscularity along with increased levels of MD behaviors compared to men who scored low on the self-objectification measures. Overall, the researchers concluded that self-objectification is a significant contributing factor for the onset of MD among men.

Additionally, research has elucidated some deadly consequences to MD behaviors. For example, Pope et al. (2005) found that men with BDD and MD exhibited significantly greater levels of psychopathology, compared to those with BDD with no MD. Particularly, men with MD were more likely to have committed suicide, had poorer quality of life, and had a higher frequency rate of using and abusing substances (e.g., alcohol) and muscle enhancement substances (e.g., steroids) compared to men without MD. Moreover, Grieve and Shacklette (2012) provided further evidence for Grieve's (2007) conceptual model of contributing factors to MD when they examined the relationship between MD and depressive symptoms among college men and found a moderately positive correlation between MD and depressive symptomology.

Finally, although limited, there have been select research studies that have examined levels of body shame and embarrassment among men suffering from MD. For

example, Olivardia et al. (2000) found that men with MD endorsed higher levels of body dissatisfaction and AAS use, and reported higher rates of mood disorders, anxiety disorders, and eating disorders compared to men who did not have MD. Furthermore, the authors found that compared with men who did not have MD, men who did had higher levels of shame, embarrassment, and deficits in both occupational and social functioning compared to men who did not have MD.

Overall, these research findings begin to elucidate the multitude of psychological, biological, emotional, and socio-cultural factors that contribute to the onset of MD. However, research employed in understanding MD among men is still scarce. The majority of the few studies investigating MD among men suggest that a development of a negative relationship with one's body is at the core of MD. Furthermore, these men then experience body dissatisfaction, body embarrassment, and body shame, and are willing to put themselves through intense workout routines, abuse AAS, and are willing to sacrifice interpersonal and romantic relations with others in pursuit of obtaining the muscular body ideal. Surprisingly, given these findings, there are limited studies identifying treatment and preventative programming for men struggling with MD. However, positive psychology has significantly influenced the field of Counseling Psychology over the last 20 years and new positive psychological constructs are being studied as protective factors against mental illness. Therefore, the next section will summarize research on self-compassion, a positive psychological construct, as it pertains to serving as a protective factor against body dissatisfaction, drive for muscularity, and MD behaviors.

Self-Compassion

Historical overview of positive psychology. From its inception during the 20th

century, Counseling Psychology has effectively differentiated itself from other disciplines by creating, implementing, and adhering to unique core values (Delgado-Romero, Lau, & Shullman, 2012). Arguably one of the most salient values that Counseling Psychology espouses is the emphasis on identifying and nurturing strengths, resources, and potentialities of all individuals (Snyder, Lopez, & Teramoto Pedrotti, 2011). This emphasis originates in the philosophy of positive psychology, which Seligman and Csikszentmihalyi (2000) operationalize as the scientific study of optimal human functioning and attempts to direct the field of Counseling Psychology toward a more balanced and complete view of mental health.

Counseling Psychology has a rich tradition in understanding what makes life worth living. Particularly, according to Seligman (1998), the three major goals of psychology have always been to: (a) cure mental illness; (b) make people's life more fulfilling; and (c) identify and nurture talents. However, after veterans returned back to the United States from World War II, the goals of psychology shifted. Primarily, there was a large demand for applied psychologists to cure mental illness and the second and third goals were thus neglected. However, the humanist movement during the 1960s brought forth prominent psychologists who continued to espouse that the field needed to refocus attention upon human strengths and potential (e.g., Maslow, 1954; and Rogers, 1961). Finally, during his 1998 presidential address to members of the American Psychological Association, Martin Seligman brought the topic of positive psychology back to the forefront by encouraging applied psychologists to redirect focus on not only curing mental illness, but to also focus on identifying and nurturing strengths among individuals and helping them live more productive lives (Seligman & Csikszentmihalyi,

2000). This presidential address reinvigorated the field and the last 18 years have consisted of an ever-growing literature base among constructs pertinent to the field of positive psychology (e.g., well-being, values, happiness, interests and abilities, hope, meaning making, gratitude, forgiveness, positive emotions, positive empathy, and courage). However, one significant construct, self-compassion, is slowly beginning to receive empirical investigation in order to understand how it can be used by applied psychologists in helping individuals build resiliency to protect them against mental illness.

Tripartite model of self-compassion. Over the last 20 years, Buddhism and western psychology have engaged in a collaboration of ideas in order to expand existing conceptualizations of psychological well-being (Neff, 2003a). Consequently, the field of psychology in the United States is beginning to gain access to scholarship pertaining to both theory and empirical findings on the Buddhist concept of self-compassion, as it pertains to mental health among individuals from various cultural backgrounds in the United States. According to Neff (2003a), self-compassion is operationally defined as “being touched by and open to one’s own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one’s suffering and to heal oneself with kindness” (p. 87). Moreover, self-compassion emphasizes an understanding to one’s own suffering and allows an individual to view their own inadequacies and failure as part of the common human condition and that all people are deserving of compassion (Neff, 2003a).

According to Neff (2003a), there are three components to self-compassion: (a) self-kindness versus self-judgment, (b) common humanity versus isolation, and (c) mindfulness versus over identification. Foremost, self-compassionate individuals are able

to offer the same kindness and understanding to themselves that they would to a friend in distress instead of being self-critical and harsh. Second, instead of believing that one's actions, beliefs, and emotions are distinct and abnormal experiences, leaving one to feel alone and isolated, self-compassionate people are able to view their own daily experiences as part of the everyday human experience. Finally, self-compassionate people are able to balance one's painful emotions instead of avoiding, suppressing, or over-identifying with them.

Moreover, Neff (2003a) articulated that the three aforementioned components of self-compassion interact with each other. Particularly, people who are able to encompass mindfulness are able to stay in the present moment, not engage in self-critical thinking, increase their levels of self-kindness, and realize that their daily experiences are part of the human condition. However, Neff (2003a) discerns that self-compassion is distinctly different from self-pity. Particularly, self-pity occurs when people become immersed in their own problems and forget that other people may be enduring similar shared experiences. Consequently, self-pity allows people to neglect shared experiences of humanity. For example, an individual might receive critical feedback from their supervisor. The individual experiences self-pity when he or she ruminates about the situation, believes that he or she is the only person to receive negative feedback, and becomes absorbed by his or her feelings that he or she forgets to take into account that other people have also received critical feedback from their supervisor at some point during their career. Consequently, the individual believes that he or she is bad or flawed, experiences feelings of shame, and is not able to remove oneself from the situation and gain perspective. However, when the same individual employs self-compassion, he or she

is able to feel more connected to others in the shared experience of being human, is able to not over-identify with one's emotions, and is able to employ self-kindness (Neff, 2003a).

Measuring self-compassion. Over the years, self-compassion has long been understood and practiced in Eastern cultures. However, although it presents as a novel construct among Western civilizations, Western psychologists have studied and applied other constructs that imitate those of self-compassion. For example, Western psychologists have introduced and applied concepts such as self-empathy, emotional regulation, and self-esteem to clients and all mimic the framework of self-compassion.

Jordan's (1997) articulation of self-empathy parallels that of self-compassion as all three components of the definition are included in understanding self-empathy. Principally, self-empathy occurs when one feels emotionally connected to other individuals in their environment, are able to recognize that they share common experiences with others, and are able to understand that they are imperfect, make mistakes, and experience failure and loss in their life so it is okay to be kind, accepting, caring, and affectionate toward oneself (Jordan, 1997). Second, self-compassion has been used as a strategy of emotional regulation in order to mitigate depressive symptomology (Diedrich, Grant, Hofmann, Hiller, & Berking, 2014). Particularly, self-compassion is similar to emotion regulation because both emphasize mindfulness, awareness over one's emotional experience, and approaching negative emotions with kindness, acceptance, and understanding. Finally, self-compassion allows individuals to be more nurturing, understanding, and kind to oneself, which decreases self-judgment thus increasing their self-esteem (Marshall, et al., 2015).

Although new to Western psychology, there has been some preliminary research to articulate differences between gender, age, and culture as it pertains to self-compassion. For example, it has been noted that compared to other age groups, adolescents endure a period of time in which they are self-critical, self-absorbed, and engage in social-comparison in order to create their self-concept. Consequently, this may influence their levels of self-efficacy, self-esteem, and thus display the lowest amounts of self-compassion compared to other age groups (Neff, & McGehee, 2010). Particularly, there is increased pressure for adolescents to fit into their social groups, succeed at academics and extracurricular activities, and balance the pressures that come with becoming more autonomous but still being dependent on their caregivers.

Moreover, through the years there have been mixed findings as it pertains to gender and self-compassion. For example, earlier research discerned that women experienced higher levels of self-compassion compared to men because they display higher levels of empathy and have a more interdependent sense of self (Cross & Madson, 1997). However, since then, Yarnell et al. (2015) articulated that females have lower levels of self-compassion compared to men because they engage in more forms of self-comparison and are more self-critical. Finally, there have been mixed findings on self-compassion pertaining to culture. For example, Markus and Kitayama (1991) concluded that people from Eastern cultures display more self-compassion compared to Western cultures because of the influence of Buddhism teachings. However, researchers have also purported that individuals from Eastern cultures are more self-critical than Westerners and this would suggest that Easterners have less levels of self-compassion (Kitayama & Markus, 2000). Overall, previous research suggests that there is not a clear understanding

among self-compassion as it pertains to Western culture.

In an attempt to measure self-compassion within Western Culture, Neff (2003b) created the self-compassion scale (SCS), a 26 item self-report measure, rated on a 5-point Likert scale, designed to assess the three main components of self-compassion along with their negative counterparts: (a) self-kindness (self-judgment); (b) common humanity (isolation); and (c) mindfulness (over-identification). Over the last 12 years, the SCS has been the most popularly used measure among scholars interested in understanding self-compassion. Although the studies have been scant, the following section will summarize the research findings on self-compassion.

Empirical findings on self-compassion. Self-compassion has been shown to promote the successful self-regulation of health-related behaviors. For example, Sirois, Molnar, and Hirsch (2015) investigated the relationship between self-compassion and coping mechanisms pertaining to living with a chronic illness (i.e., irritable bowel syndrome, arthritis). Overall, the authors found that self-compassion was associated with greater use of adaptive coping strategies (e.g., support seeking, active coping, planning) and less use of maladaptive ones, thus allowing them to experience less stress compared to those who had lower levels of self-compassion. In summary, the authors hypothesized that people with higher levels of self-compassion are at an advantage because their coping styles promote adjustment to an illness and therefore engage in appropriate problem solving strategies which minimizes stress.

Moreover, Sirois, Kitner, and Hirsch (2015) conducted a meta-analysis to examine associations between self-compassion and health-promoted behaviors (e.g., exercise, nutrition, sleep, stress management) among a large heterogeneous sample.

Interestingly, the researchers found that those who self-reported higher levels of self-compassion reported engaging in more health-promoting behaviors compared to those with lower levels of self-compassion. Particularly, the authors hypothesized that self-compassion facilitates the health behavior change by encouraging positive emotions necessary to maintain motivation to work towards health promoting goals while decreasing the negative responses to minor setbacks and failures. Also, Terry and Leary (2011) discerned that self-compassion promotes the self-regulation of positive health related behaviors because those who practice self-compassion experience a reduction in defensiveness and self-criticism, and are more willing to comply with medical recommendations. Furthermore, the authors noted that people with higher levels of self-compassion are better able to cope with daily stressors and are less likely to be negatively impacted by illness and injury, which allows them to focus their energies on maintaining self-care practices.

Additionally, researchers have investigated the relationship between self-compassion and mental health constructs pertaining to men, and have found significant findings. Particularly, Hiraoka et al. (2015) examined the relationship between self-compassion and post-traumatic stress disorder (PTSD) symptoms among a predominately male (83.5%) sample of war veterans. After accounting for combat exposure, the authors found a strong significant negative correlation between self-compassion and PTSD symptom severity. Moreover, the authors found that after accounting for combat exposure, self-compassion baseline measures predicted PTSD symptom severity one year later, thus demonstrating that self-compassion may influence the experience of PTSD symptomology among war veterans.

Likewise, self-compassion has been shown to have treatment efficacy among other populations for different presenting concerns. For example Tesh, Learman, and Pulliam (2015) proposed that mental health providers implement self-compassion strategies in order to aid clients who are survivors of intimate partner violence (IPV). Previous research has shown that survivors of intimate partner violence carry with them immense feelings of shame, self-blame, inadequacy, and often feel like they are alone in their pain and suffering (Beck et al., 2011). Unfortunately, many survivors experience depression, suicidality, anxiety, and isolation (Ouellet-Morin et al., 2015). However, research has shown that learning about self-compassion reduces feelings of shame, anxiety, depression, and suicidality, (e.g., Campbell, 2002; Gilbert & Procter, 2006; Kramer, Lorenzo, & Mueller, 2004) along with increasing feelings of connectedness, well-being, and hope (e.g., Neff & Pommier, 2012). Therefore, Tesh et al. (2015) elucidated recommendations for professionals working with survivors of intimate partner violence including various open-ended questions and activities geared toward building self-compassion among survivors.

However, survivors of IPV are not the only ones susceptible to experiencing shame. Although not highly examined, self-compassion and shame have been studied in college-men as it pertains to conformity to traditional masculine ideology. Particularly, Reilly, Rochlen, and Awad (2014) explored the relationships that masculinity and shame have on self-compassion and self-esteem among college-aged men. The authors found that there was a negative correlation between conformity to traditional masculine norms and self-compassion. Furthermore, the authors found that men who were more self-compassionate had lower levels of conformity to traditional masculine norms,

experienced lower levels of shame, and had a higher level of self-confidence compared to those who endorsed traditional masculine norms. Moreover, men are taught from a young age to both avoid and internalize feelings of shame. Therefore internalizing and/or avoiding emotions can aid in men becoming self-critical, less understanding, and less comforting when they experience failure or distress. However, the authors speculate that teaching men to become more self-compassionate may allow them to become less self-critical and more understanding of themselves. Furthermore, this may reduce some of the mental health consequences (i.e., substance use, depression, anger, hostility) that occur when men internalize feelings of shame.

Finally, researchers have investigated the relationship between self-compassion, body dissatisfaction, and eating disorders. Particularly, it has been documented that body dissatisfaction among women is a major source of suffering. Furthermore, body dissatisfaction and body shame are regarded as prominent features to the development of eating disorders (DSM-5) and are associated with higher levels of depression and anxiety (e.g., Szymanski & Henning, 2007), lower self-esteem (Grossbard, Lee, Neighbors, & Larimer, 2009), and poorer quality of life (Ganem, Heer, & Morera, 2009). However, Tylka, Russell, and Neal (2015) found that self-compassion was instrumental in the amelioration of eating behaviors. Particularly, the researchers found that women with higher levels of self-compassion were more immune to the societal pressures of internalizing the thin ideal. Furthermore, when these women were confronted with media images of the thin ideal, they were less likely to interpret these images as thinness-related pressure and were less likely to engage in disordered eating compared to women with lower levels of self-compassion. Particularly, it has been proposed that increasing self-

compassion among women with body dissatisfaction can teach them how to be more understanding, less self-critical about their bodies, realize that they are not the only ones who are suffering, and begin to learn new ways of valuing themselves.

To investigate the relationship between self-compassion and body image among women, Albertson, Neff, and Dill-Shackleford (2015) had female participants randomly assigned to two groups. Within the experimental group, women were exposed to various 20-minute podcasts (e.g., body scan, affectionate breathing, and loving kindness meditation) on self-compassion over a three-week period of time. The authors found that compared to the waitlist control group, women listening to guided self-compassion meditation podcasts for three weeks had a positive impact on their levels of self-compassion as well as their body image. Particularly, the self-compassion intervention significantly decreased body dissatisfaction, decreased body shame, and increased levels of body appreciation among women in the experimental group compared to the control group. The authors purported that the results occurred because the intervention assisted women in learning how to treat their bodies with kindness instead of with criticism. Doing this allowed women to become more accepting of their bodies. Furthermore, learning that bodies come in all shapes and sizes allowed the women to realize that other people struggle with body image concerns and that they are not alone in this struggle. Also, practicing mindfulness allowed the women to view their bodies more clearly without exaggerating perceived flaws. Finally, Albertson et al. (2015) purported that learning about how to become more self-compassionate as it pertains to one's body allowed the women to discover new ways of relating to themselves, not solely basing their self-efficacy and self-worth on their body shape and size.

In summary, self-compassion entails being kind and understanding toward oneself in instances of pain or failure rather than being self-critical, perceiving one's experiences as part of the larger human experience rather than seeing them as isolating, and holding painful thoughts and feelings in mindful awareness rather than over-identifying with them. Although a relatively new construct in Western scholarship, research is beginning to elucidate how self-compassion can serve as a protective factor against mental health concerns. Foremost, research has shown that self-compassion aids in the prevention of eating disorders and negative body image. However, most of the self-compassion and body image research has been investigated with female populations, thus neglecting men. Therefore, the current study seeks to expand the literature by examining how gender socialization impacts the relationship that men develop with their bodies, and how self-compassion may serve as a catalyst in building a healthy body image.

The Current Study

Recently, more college-aged men are seeking psychological help for body image problems, primarily focused on muscularity (Davey & Bishop, 2006). With the increase in men seeking psychological assistance and the limited amount of research that has been conducted on men and body image, it is imperative that research begins to focus on factors that may impact negative body image among men and negative behaviors in which men engage to increase their body satisfaction (i.e. eating disorder symptomology, excessive exercise, anabolic steroid use and supplements). Although GRC in men has resulted in negative psychological and behavioral consequences (e.g., unsafe sex, alcohol dependence, substance abuse, domestic violence), there has been a dearth of research investigating such consequences with male body image disturbances and symptoms

related to MD. Also, there has been scant literature to date examining self-compassion among college-age men as it pertains to serving as a protective factor against body dissatisfaction.

Furthermore, it is critical to study body dissatisfaction in college-aged (19-26) men because this group undergoes numerous changes during this developmental period. Robertson (2005) asserts that during this time, men become more autonomous, more flexible about gender roles, and improve their critical thinking and communication of ideas. Also, college-aged men allocate more time and are more open to modifying their attitudes, values, morals, ideas, and relationship styles (Robertson, 2005). More research needs to be conducted on college-aged men who identify as heterosexual in hopes that prevention programs may be implemented to increase awareness and skills in order for them to combat societal pressures to conform to these false ideals related to masculinity and body image.

Few studies have examined the relationship that traditional masculine ideology and gender role strain have on the development of men's body satisfaction, their drive for muscularity, and MD characteristics. The current cross-sectional research design was aimed to answer the following research questions; (a) what is the relationship between masculine ideology, GRC, self-compassion, body image, drive for muscularity, MD characteristics, and weight lifting among college-aged men; (b) does GRC mediate the relationship between masculine ideology, body dissatisfaction, drive for muscularity and MD characteristics; and (c) does self-compassion mediate the relationship between masculine ideology and body dissatisfaction, drive for muscularity, and MD characteristics? Specifically, the following hypotheses were evaluated:

1. There will be significant positive correlations between GRC and (a) traditional masculine ideology, (b) body dissatisfaction, (c) drive for muscularity, and (d) MD characteristics;
2. There will be significant negative correlations between self-compassion and (a) traditional masculine ideology, (b) body dissatisfaction, (c) drive for muscularity, and (d) MD characteristics;
3. There will be a significant negative correlation between GRC and self-compassion;
4. There will be significant positive correlations between the amount of day's men weight lift and (a) traditional masculine ideology, (b) gender role conflict, (c) body dissatisfaction, (d) drive for muscularity, (e) MD characteristics and a significant negative correlation between the amount of day's men weight lift and (f) self-compassion.
5. GRC will mediate the relationship between conformity to traditional masculine norms and body dissatisfaction, drive for muscularity, and MD characteristics (Figure 2.1);
6. Self-compassion will mediate the relationship between conformity to traditional masculine norms and body dissatisfaction, drive for muscularity, and MD characteristics (Figure 2.1).

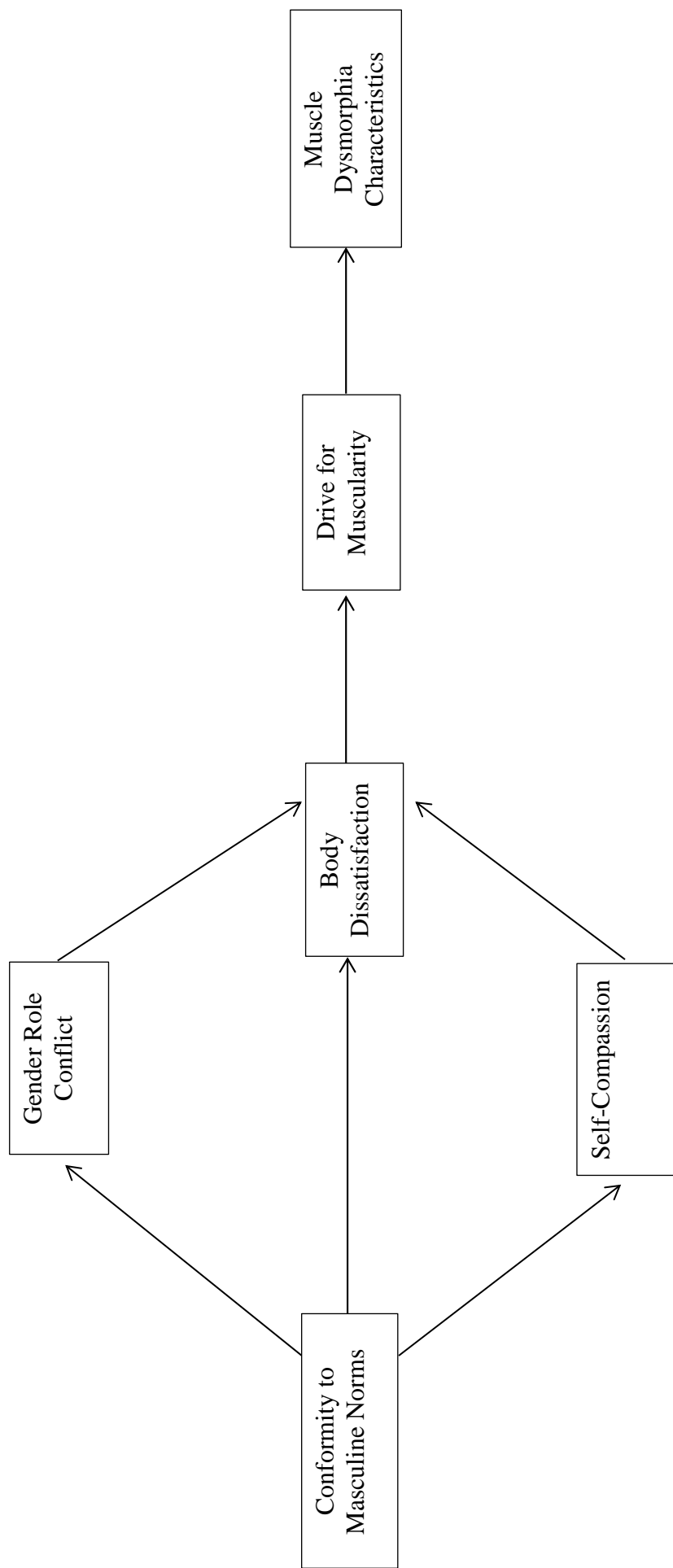


Figure 2.1. Empirical model of relations.

Chapter III

Method

Given the increase in prevalence rates of men seeking psychological treatment for negative body image and muscle dysmorphia (MD) characteristics, it is essential for research to identify constructs that both propagate and mitigate this pervasive health issue facing college-aged men. Therefore, the current study examined conformity to traditional masculine norms, body dissatisfaction, drive for muscularity, and MD characteristics through the lens of gender role conflict (GRC) and self-compassion. The following chapter explains the methods used in this study. Particularly, information about participants and recruitment will be expounded upon. Second, a detailed description of the instruments employed will be summarized. Finally, a thorough explanation of procedures used to conduct the study, including data analysis strategies, will be provided.

Purpose and Research Hypotheses

Due to the dearth of literature examining men's body dissatisfaction, it is paramount that more research examines and elucidates factors that contribute to men's drive for muscularity, body dissatisfaction, and MD characteristics. A base of information now suggests that college-age men are susceptible to body image disorders in a similar way that has been reported historically among their female counterparts. Increasingly, researchers are finding that men may develop a preoccupation with their body image, which can lead to poor self-esteem and other appearance worries. It is important that more studies be conducted in order to inform practitioners of the prevalence of MD and related constructs. Therefore, the current study tested a mediation model associating conformity to masculine norms with body dissatisfaction, drive for muscularity, and MD

characteristics, identifying both GRC and self-compassion as mediators of this relation (see Figure 2.1). Specifically, the following hypotheses were evaluated:

1. There will be significant positive correlations between GRC and (a) traditional masculine ideology, (b) body dissatisfaction, (c) drive for muscularity, and (d) MD characteristics;
2. There will be significant negative correlations between self-compassion and (a) traditional masculine ideology, (b) body dissatisfaction, (c) drive for muscularity, and (d) MD characteristics;
3. There will be a significant negative correlation between GRC and self-compassion;
4. There will be significant positive correlations between the amount of day's men weight lift and (a) traditional masculine ideology, (b) gender role conflict, (c) body dissatisfaction, (d) drive for muscularity, (e) MD characteristics and a significant negative correlation between the amount of day's men weight lift and (f) self-compassion.
5. GRC will mediate the relationship between conformity to traditional masculine norms and body dissatisfaction, drive for muscularity, and MD characteristics (Figure 2.1);
6. Self-compassion will mediate the relationship between conformity to traditional masculine norms and body dissatisfaction, drive for muscularity, and MD characteristics (Figure 2.1).

Research Design

The current study utilized a cross-sectional correlational research design (Heppner, Wampold, & Kivlighan, 2008). Particularly, the current study examined if the effect of conformity to traditional masculine norms on body dissatisfaction, drive for muscularity, and MD characteristics among college-aged men was mediated by GRC and self-compassion. Since data was collected from college-aged men in their natural environment, the current study was a field study.

Sample and Participant Selection

The target population for the current study included heterosexual college-aged men (ages 19-26). A purposive sampling method was used for this study. Participants were recruited at a large Midwestern university, a medium sized Midwestern community college, various fitness centers in a large Midwestern city, and online through various social media outlets (i.e., Facebook, Twitter, and LinkedIn).

For the current study, inclusion criteria included: (a) the participant must self-identify as male; (b) must self-identify as heterosexual; (c) must have grown up in the United States; (d) be between the ages of 19 to 26; and (e) was not currently active in a collegiate sport. When considering exclusion criteria, men who are not between the ages of 19-26, identify as gay or bisexual, currently active in a collegiate sport, and identify as an international student were excluded from participating. Although it is important to study body image dissatisfaction among men who are international students and/or identify as gay or bisexual, these demographic groups are outside the scope of this study. Particularly, males who are raised in non-Western cultures or who identify as gay or bisexual may have received different messages about men's ideal body type, which could impact the results of this study.

A total of 285 individuals began the online survey. After accounting for participants that did not complete the entire survey ($n=74$), and invalid data ($n=57$), the remaining data set included 154 cases. As it pertains to the sample, a majority of the participants were 19 years old (49.2%, $n=66$), followed by 20 years old (21.4%, $n=33$), 21 years old (16.2%, $n=25$), 22 years old (9.7%, $n=15$), 23 years old (3.9%, $n=6$), 24 years old (1.3%, $n=2$), 25 years old (3.2%, $n=5$), and 26 years old (2.3%, $n=2$). In terms of racial and ethnic identities, the sample was predominantly White (89.6%, $n = 138$). The racial and ethnic identities of the remaining sample included Asian American or Pacific Islander (3.9%, $n=6$), Hispanic/Latino/a (1.9%, $n=3$), bi-racial (1.3%, $n=2$), African American/Black (0.6%, $n=1$), and other (2.6%, $n=4$). The largest religious/spiritual affiliation in the sample was Catholic (33.8%, $n=52$), followed by Protestant Christian (24.7%, $n=38$), Other (14.3%, $n=22$), Atheist (9.7%, $n=15$), Agnostic (7.1%, $n=11$), Questioning (6.5%, $n=10$), Hindu (1.3%, $n=2$), Islamic (1.3%, $n=2$), and Jewish (.6%, $n=1$).

With regards to relationship status, a majority of the sample identified as single (45.5%, $n=70$), followed by in a relationship but not living with partner (29.9%, $n=46$), never dated or been in a romantic relationship (13%, $n=20$), dating casually (7.1%, $n=11$), in a romantic relationship and living with partner (3.2%, $n=5$), and married (1.3%, $n=2$). As it pertains to work status, a majority of the sample were students (79.2%, $n=122$), followed by part-time employee (13.6%, $n=21$), and full-time employee (7.1%, $n=11$). Of the 122 participants who were students, the majority identified as freshman (31.2%, $n=48$), followed by sophomore (19.5%, $n=30$), junior (14.9%, $n=23$), senior

(11.7%, n=18), and graduate student (1.9%, n=3). Finally, a majority of the sample have never been involved in a fraternity (64.9%, n=100).

When asked how many days a week they spend weight lifting, a majority of the participants indicated that they spent zero days weight lifting (34.4%, n=53), followed by three days per week (16.9%, n=26), four days per week (14.9%, n=23), one day per week (9.1%, n=14), five days per week (7.8%, n=12), and six days per week (6.5%, n=10). Moreover, a majority of the participants spend one hour per day lifting (68.8%, n=106), followed by two hours per day (18.2%, n=28), and three hours per day (.6%, n=1). Finally, a majority of the sample indicated that they did not take performance enhancement substances (61.7%, n=95) and did not take anabolic steroids (98.7%, n=154).

Measures

Validity Indicators. A series of 12 validity indicators were dispersed throughout the survey. These indicators consisted of questions that asked the participants for specific responses to the items (e.g., “Please answer “Agree” for this question.”). Participants were required to correctly answer a minimum of 10 validity indicator items. Participants answering less than 10 items correctly were excluded from analyses due to “invalid” or “inconsistent” response patterns.

Demographic/Background Information. In order to verify that the convenience sample was heterogeneous in nature, participants were asked to respond to basic demographic questions, including ethnicity, education, socioeconomic status, and age. Moreover, participants were asked to disclose their gender and sexual orientation. If participants did not identify as a heterosexual male, their information was not considered

valid. Furthermore, information was gathered about exercise habits, supplement use, collegiate athlete status, and steroid use.

Conformity to Masculine Norms Inventory-46 (CMNI-46; Parent & Moradi, 2009) assessed masculine gender role conformity for the current study. The original Conformity to Masculine Norms Inventory (CMNI; Mahalik et al., 2003b) was a salient measure of masculinity ideology and was used to assess individual's experiences and conformity to 11 traditional gender role norms (i.e., emotional control, winning, playboy, violence, self-reliance, risk-taking, power over women, dominance, primacy of work, pursuit of status, and disdain for homosexuality; Thompson & Bennett, 2015). However, a significant criticism of the original 94-item measure was its length. Moreover, researchers called for a refinement of the measure to increase its practical utility. Therefore, to address these needs, Parent and Moradi (2009) developed the CMNI-46. This revised and shorter version assesses nine traditional masculine norms: Winning (six items; e.g., "It is important for me to win"), Emotional Control (six items; e.g., "I never share my feelings"), Risk-Taking (five items; e.g., "I enjoy taking risks"), Violence (six items; e.g., "sometimes violent action is necessary), Power over Women (four items; e.g., "women should be subservient to men"), Playboy (four items; e.g., "it would be enjoyable to date more than one person at a time"), Self-Reliance (five items; e.g., "I never ask for help"), Primacy of Work (four items; e.g., "I feel good when work is my first priority"), and Heterosexual Self-Presentation (six items; e.g., "I would be furious if someone thought I was gay"). Participants respond to these items by using a four-point Likert-type scale (*0=strongly disagree, 3=strongly agree*) and subscale scores are determined by taking the average of each item in the subscale, with higher scores

indicating greater levels of conformity to traditional masculine norms.

Among a sample of Canadian men, the CMNI-46 subscales generated large positive correlations with the original CMNI subscales ($r = .89$ to $.98$) and internal consistency reliabilities were acceptable (i.e., $.86$ for Emotional Control, $.83$ for Winning, $.84$ for Playboy, $.86$ for Violence, $.84$ for Self-reliance, $.84$ for Risk-taking, $.78$ for Power over Women, $.77$ for Primacy of Work, and $.91$ for Heterosexual Self-Presentation; Parent & Moradi, 2009). Moreover, in order to further examine the psychometric properties of the CMNI-46, Parent and Moradi (2011) examined the reliability, validity, and factor structure among an independent sample of 255 college men. The authors found evidence of good to excellent ranges of internal consistency reliability (i.e., $\alpha = .78$ to $.89$) across the subscales, strong correlations with convergent and discriminant validity indicators supporting the validity of the subscales, and confirmatory factor analyses demonstrating acceptable fit of the hypothesized factor structure. With regards to the CMNI-46 total score, internal consistency reliability for this sample was high ($\alpha = .90$) and a mean score was calculated (see Table 4.1).

Gender Role Conflict Scale Short Form (GRCS-SF; Wester, Vogel, O'Neil, & Danforth, 2012) was used to measure levels of gender role restriction among men for the proposed study. The GRCS-SF is a 16-item scale that measures personal dimensions of gender role conflict in men from their subjective experience of meeting expectations associated with traditional masculine norms. The scale uses a 6-point Likert-type scale that ranges from 1 (*strongly disagree*) to 6 (*strongly agree*) to indicate the degree participants agree with the given statements. The GRCS-SF consists of four sub-scales: Success, Power, and Competition (SPC; four items: e.g., "I strive to be more successful

than others”); Restrictive Emotionality (RE; four items: e.g., “I have difficulty expressing my emotional needs to my partner”); Restrictive Affectionate Behavior between Men (RABM; four items: e.g., “Affection with other men makes me tense”); and Conflict between Work and Family (CBWFR; four items: e.g., “My work or school often disrupts other parts of my life). Subscale scores are determined by taking the average of each item in the subscale, with higher scores indicating greater levels of GRC.

The GRCS-SF was adopted from the original GRCS (O’Neil, et al., 1986), which is a 37-item measure containing the four aforementioned factors. The GRCS has been used in numerous studies, but limitations have been raised (O’Neil, 2015). Particularly, scholars discerned that (a) certain items from the measure elicit different responses based on the participants’ race (Norwalk, Vandiver, White, & Englar-Carlson, 2011), (b) there was uncertainty if particular GRC items measure conflict (Thompson & Pleck, 1995), and (c) some items needed to be deleted or revised in order to meet criteria for acceptable model fit with the data (Rogers, Abbey-Hines, & Rando, 1997). Therefore, in order to address these criticisms, Wester et al. (2012) created the revised version of the GRCS. Particularly, according to O’Neil (2015), the purpose of creating the short version was to develop a shorter, more cultural applicable measure of GRC. To do this, confirmatory factor analyses were performed among a heterogeneous sample of men and 21 items were eliminated because they had factor loadings less than .60 (Wester et al., 2012). Consequently, the remaining 16 items (four items each per subscale) were examined to ensure that the items were reliable and valid. As it pertains to reliability, all subscales demonstrated appropriate levels of internal consistency ($\alpha = .77$ for RE, $.77$ for CBWFR, $.78$ for RABBM, and $.80$ for SPC). Moreover, confirmatory factor analysis supported the

four factor-model of the GRC construct. Finally, the authors examined correlations between the GRCS and the GRCS-SF in order to determine validity and determined that all four subscales of the GRCS-SF significantly correlated with the original GRCS subscales, showing evidence for construct validity (Wester et al., 2012). With regards to the GRCS-SF total score, internal consistency reliability for this sample was high ($\alpha = .84$) and a mean score was calculated (see Table 4.1).

Self-Compassion Scale (SCS; Neff, 2003b) was used in the current study to assess the three main components of self-compassion and their negative counterparts, self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification. The SCS consists of 26 worded items that are both positively and negatively worded, and uses a 5-point Likert scale that ranges from 1 (*almost never*) to 5 (*almost always*). The SCS consists of six sub-scales: Self-kindness (five items; e.g., “I try to be loving towards myself when I’m feeling emotional pain”), Self-judgment (five items; e.g., “I’m disapproving and judgmental about my own flaws and inadequacies”), Common Humanity (four items; e.g., “When things are going badly for me, I see the difficulties as part of life that everyone goes through”), Isolation (four items; e.g., “When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world”), Mindfulness (four items; e.g., “When something upsets me I try to keep my emotions in balance”), and Over-identified (four items; e.g., “When I am feeling down I tend to obsess and fixate on everything that’s wrong”). In order to obtain a total self-compassion score, respondents’ subscale scores are averaged after the negative items are reverse coded, and higher scores indicate higher levels of self-compassion. As it pertains to reliability, the three subscales on the SCS demonstrated

appropriate levels of internal consistency ($\alpha = .75$ for mindfulness versus over-identification subscale, $.77$ self-kindness versus self-judgment subscale, and $.79$ for common humanity versus isolation subscale). Moreover, the SCS has been successfully used in a sample of college-students (both men and women) and demonstrates both convergent and discriminant validity and excellent test-retest reliability ($\alpha = .93$; Neff, 2003b). With regards to the SCS total score, internal consistency reliability for this sample was high ($\alpha = .92$) and a mean score was calculated (see Table 4.1).

Male Body Assessment Scale (MBAS; Tylka, Bergeron, & Schwartz, 2005) was used to assess levels of men's body dissatisfaction. The MBAS consists of 24 items and uses a 6-point Likert-type scale that ranges from 1 (*never*) to 6 (*always*). The MBAS consists of three subscales: Muscularity (12 items; e.g., "I think I have too little muscle on my body"), Low Body Fat (10 items; e.g., "I think my body should be leaner"), and Height (two items; e.g., "I wish I were taller"). After reverse scoring those items that require it, all items are to obtain a total score. Furthermore, subscale items can be averaged to obtain subscale scores. Higher scores reflect more negative body attitudes. The MBAS has been successfully used with a sample of college men and demonstrates evidence of convergent, concurrent, and discriminant validity, in addition to test-retest reliability ($r = .81 - .94$) and internal consistency reliabilities for both the total score and subscale scores ($\alpha = .80 - .94$). With regards to the MBAS total score, internal consistency reliability for this sample was high ($\alpha = .94$) and a mean score was calculated (see Table 4.1).

Drive for Muscularity Scale (DMS; McCreary & Sasse, 2000) was used to measure the drive for muscularity within men. The DMS consists of 15 statements about

muscularity-oriented behaviors (e.g., “I lift weights to build muscle”) and muscularity-oriented attitudes (e.g., “I wish I were more muscular”). Participants rate each item on a 6-point Likert-type scale ranging from 1 (*never*) to 6 (*always*). The DMS is scored by obtaining the average rating of the 15 items, with higher scores indicating a greater drive for muscularity. The DMS has shown good internal consistency reliability ($\alpha = .84$) for men, and good evidence of convergent and discriminant validity among college-aged men (McCreary & Sasse, 2000). With regards to the DMS total score, internal consistency reliability for this sample was high ($\alpha = .90$) and a mean score was calculated (see Table 4.1).

Muscle Appearance Satisfaction Scale (MASS; Mayville, Williamson, White, Netemeyer & Drab, 2002) was used to measure cognitive, affective, and behavioral dimensions of MD, and is comprised of 19 items. Participants rate each item on a 5-point Likert scale ranging from 1 (definitely disagree) to 5 (definitely agree) and high scores on the overall scale reflect higher levels of MD. Psychometric evaluation of the MASS across two samples of college-aged male weight lifting participants ($N = 372$) revealed a stable five-factor structure: Bodybuilding Dependence (five items, e.g., “If my schedule forces me to miss a day of working out with weights, I feel very upset”), Muscle Checking (four items, e.g., “I often seek reassurance from others that my muscles are big enough”), Substance Use (four items, e.g., “It is OK to use steroids to add muscle mass”), Injury (three items, e.g., “I often ignore a lot of physical pain while I am lifting to get bigger”), and Muscle Satisfaction (three items, e.g., “When I look at my muscles in the mirror, I often feel satisfied with my current muscle size;” Mayville et al., 2002). As it pertains to internal consistency reliability, the five subscales on the MASS demonstrated

appropriate levels of internal consistency ($\alpha = .78$ for bodybuilding dependent subscale, $.79$ for body checking subscale, $.74$ for substance use subscale, $.77$ for injury subscale, $.75$ for satisfaction subscale, and $.87$ for total MASS). Finally, test-retest reliability, and construct validity were established with the MASS total score and its subscales (Mayville et al. 2002). With regards to the MASS total score, internal consistency reliability for this sample was high ($\alpha = .90$) and a mean score was calculated (see Table 4.1).

Procedure

After obtaining approval from the Institutional Review Board (IRB) at the University of Nebraska-Lincoln, prospective participants were contacted through electronic mail, electronic advertisements, and flyers that provided relevant information about the study. During recruitment, the author made contact with leaders of various organizations on the campus of a large Midwestern university (i.e., University Housing, Multicultural Student Organizations, Campus Recreation, Student Union, Library, and Outdoor Adventure Center) in order to distribute recruitment flyers (See Appendix A) in preapproved posting locations. Also, the author contacted the Office of Greek Affairs and was able to attend a meeting in which delegates for all approved university fraternities were present. Also, the author made contact with faculty of various disciplines in which men traditionally study (e.g., accounting, engineering, mathematics, biology; see Appendix B) and attended classes to recruit (see Appendix C) and to distribute slips with the URL to access the study. Furthermore, the author posted flyers on the campus of a community college, and in local gyms. Finally, the author posted recruitment information on various social media sites (i.e., Facebook, Twitter, and LinkedIn; See Appendix D).

All measures were administered over a secure server via Qualtrics. The data was encrypted while in transit. The data collected from the survey was password protected and was only accessible by the researcher and his adviser. In an effort to maintain confidentiality, neither identifying information nor computer IP addresses were collected from research participants. Upon accessing the secure website, a consent form (see Appendix E) was provided, which outlined the procedures and perceived risks and benefits involved in participating. The consent form also included contact information of the primary investigator in case participants had questions or concerns, as well as contact information for IRB. If participants consented to participate in the study, they were redirected to the beginning of the survey. If participants denied participation, they did not gain access to the survey. Participants were required to provide consent before participating in the study.

After giving consent, participants completed the CMNI-46 (due to restrictions, the measure is not published in the appendices), GRCS-SF (due to restrictions, the measure is not published in the appendices), SCS (see Appendix F), MBAS (see Appendix G), DMS (see Appendix H), and MASS (see Appendix I). It is important to note that all the aforementioned measures were counterbalanced to control for possible carryover effects. Next, the participants completed the demographic questionnaire (see Appendix J). Finally, after completing all the measures and demographics, the participants were directed to another survey in which they decided whether to receive extra credit for their participation (agreed upon by their respective instructor) or were entered into a drawing to win one of four \$50.00 Amazon.com gift cards. Overall odds of receiving a gift card were dependent on how many participants completed the study. With 154 people

participating in the study, the odds of receiving a gift card were 1 in 38.5. Finally, participants who were members of a fraternity were asked to indicate what fraternity they were members of. The author made an agreement with the Office of Greek Affairs that if a fraternity had at least 75% of its members participate, the author would write a letter, on their behalf, to their national chapter, stating that the local chapter here at the university has served as leaders on campus by contributing to research about men's health and wellness. Altogether, the study took participants approximately 30 to 40 minutes to complete.

In summary, chapter three provided information about the methods employed. Particularly, this chapter included a list of the research questions and research hypotheses, demographic information about the participants, recruitment strategies, instruments used, and the procedures of the study. The next chapter will include information about the results of the study and the methods used to analyze the data.

Chapter IV

Results

The following chapter describes and summarizes the statistical analyses used to evaluate the research questions and hypotheses established in the previous chapters. First, data preparation and screening procedures will be discussed. Next, each hypothesis will be addressed in the order presented previously. For hypotheses one through four, bivariate correlations were conducted to examine the relations between conformity to masculine norms, gender role conflict (GRC), self-compassion, body dissatisfaction, drive for muscularity, and muscle dysmorphia (MD) characteristics and results will be presented. Finally, a path analysis was conducted to test the hypothesized model.

Data Preparation

For the current study, data were collected through Qualtrics and were transferred into SPSS 23.0 for data analysis. After transferring, the data were cleaned and spot-checked to ensure that the data file transferred successfully. After data verification, validity items were recoded and summed, demographic variables were recoded, particular items among the measures were recoded, and sub-scores/total scores of each measure were created.

Data Screening

Next, data screening procedures were implemented. At the onset of data analysis, 285 individuals consented to participate in the study. However, 74 individuals did not complete all the measures and consequently, were removed from the sample. Following their removal, 211 individuals remained in the dataset.

Next, the embedded validity items were examined for the remaining 211

participants. A total of 12 validity items (three items for CMNI-46, one item for GRC-SF, two items for SCS, two items for MBAS, one item for DMS, two items for MASS, and one item for demographics) were dispersed throughout the survey. Validity items were written as simple instructions to select a specific response choice, such as *“To be sure you are paying attention, please mark ‘agree’ for this item.”* Participants with more than two incorrect validity items were suspected of random responding and removed from the sample. A total of three individuals responded incorrectly to at least two validity items and was thereby suspected of random responding. These individuals were removed from the sample, resulting in 208 remaining participants.

Of the remaining 208 participants, 40 individuals did not identify between the ages of 19-26 years old and were thus removed from the sample. Of the remaining 168 participants, one individual did not identify as male and was thus removed from the sample. Of the remaining 167 participants, seven individuals did not identify as heterosexual and were thus removed from the sample. Of the remaining 160 participants, six individuals indicated that they were currently a collegiate athlete and were removed from the sample. In sum, there were a total of 154 completed and valid cases within the study sample.

Results of the Hypotheses

Bivariate Associations. After creating the subscale/total scores for each measure, descriptive statistics (i.e., mean, standard deviation, and range) for each measure’s total score was computed (see Table 4.1). Next, to assess the relationships between conformity to masculine norms, gender role conflict, self-compassion, body dissatisfaction, drive for muscularity, MD characteristics, and weight lifting, bivariate analyses were conducted

using Pearson correlations. A correlation matrix (presented in Table 4.1) was generated in order to evaluate hypotheses one through four.

Table 4.1
Descriptive Statistics and Correlation Matrix among Outcome Variables

	M	R	1	2	3	4	5	6	7
	(SD)								
1. CMN (N=144)	1.47 (0.32)	0-192	-						
2. GRC (N=150)	3.53 (0.70)	16-96	.61**	-					
3. SC (N=145)	3.00 (0.68)	26-130	-.16	-.33**	-				
4. MBA (N=148)	3.16 (0.90)	24-144	.18*	.27**	-.40**	-			
5. DM (N=154)	2.91 (0.90)	15-90	.34**	.37**	-.24**	.51**	-		
6. MAS (N=152)	2.30 (0.64)	19-95	.43**	.41**	-.34**	.49**	.71**	-	
7. WTL (N=154)	3.18 (2.00)	0-7	.23**	.27**	-.052	.14	.61**	.54**	-

Note. M=Mean, SD=Standard Deviation, R= Range, CMN= Conformity to Masculine Norms, GRC= Gender Role Conflict, SC = Self-Compassion, MBA=Male Body Assessment, DM=Drive for Muscularity, MAS=Muscle Appearance Satisfaction, WTL=Weight Lifting (days per week). * $p < .05$, ** $p < .01$

As hypothesized, a significant positive correlation was revealed ($r = .61, p < .01$) between total GRC and men's total conformity to traditional masculine norms (H1a), meaning as men's level of conformity to masculine norms increases, so does their GRC. Secondly, a significant positive correlation emerged ($r = .27, p < .01$) between men's total GRC and body dissatisfaction (H1b), meaning that as men's GRC increases, so do their levels of body dissatisfaction. Also, a significant positive correlation emerged ($r = .37, p < .01$) between men's total GRC and drive for muscularity (H1c), meaning that as men's GRC increases, so does their drive to obtain muscularity. Finally, a significant positive correlation emerged ($r = .41, p < .01$) between men's total GRC and MD characteristics (H1d), meaning that as men's GRC increases, men engage in more characteristics of MD.

Regarding hypothesis 2, no significant correlation was found ($r = -.16, p > .05$) between self-compassion and men's total conformity to traditional masculine norms (H2a), contrary to hypothesis. However, as hypothesized, a significant negative correlation emerged ($r = -.40, p < .01$) between men's level of self-compassion and their level of body dissatisfaction (H2b), meaning that as men's self-compassion increases, their level of body dissatisfaction decreases. Also, a significant negative correlation emerged ($r = -.24, p < .01$) between men's level of self-compassion and drive for muscularity (H2c), meaning that as men's self-compassion increases, their drive for muscularity decreases. Furthermore, a significant negative correlation emerged ($r = -.34, p < .01$) between men's level of self-compassion and MD characteristics (H2d), meaning that as men's self-compassion increases, their engagement in MD characteristics decreases. Furthermore, as hypothesized, a significant negative correlation emerged ($r = -$

.33, $p < .01$) between men's level of self-compassion and GRC (H3), meaning that as men's self-compassion increases, their level of GRC decreases.

Finally, as it pertains to hypothesis four, a significant positive correlation emerged ($r = -.23, p < .01$) between the number of days that men weight lift and conformity to traditional masculine norms (H4a), meaning that as the number of days that men weight lift increases, so does their level of conformity to traditional masculine norms. Secondly, a significant positive correlation emerged ($r = .27, p < .01$) between the number of days that men weight lift and GRC (H4b), meaning that as the number of days that men weight lift increase, so does their level of GRC. Interestingly, contrary to the author's hypothesis, no significant correlation was found ($r = -.05, p > .05$) between the number of days men weight lift and self-compassion (H4f) nor body dissatisfaction ($r = .14, p > .05$; H4c). However, as hypothesized, a significant positive correlation emerged ($r = .61, p < .01$) between the number of days that men weight lift and their drive for muscularity (H4d), meaning that as the number of days that men weight lift increases, so does their drive for muscularity. Finally, a significant positive correlation was revealed ($r = .54, p < .01$) between the number of days men weight lift and MD characteristics (H4e), meaning that as the number of days that men weight lift increases, so does their MD characteristics.

Path Analysis. A path analysis was utilized to evaluate the hypotheses pertaining to the direct and indirect relations among the variables (see Figure 2.1). All analyses were conducted with the utilization of MPlus Version 7.11 (Muthén & Muthén, 2012). First, direct relations between conformity to masculine norms, GRC, self-compassion, body dissatisfaction, drive for muscularity, and MD characteristics were examined. Next, each

variable's total and specific indirect effects were examined utilizing full information maximum likelihood estimation (FIML). Finally, the hypothesized relations in the model indicating that (a) the mediating effects of GRC (M1) to explain the relations between conformity to masculine norms (X1) and body dissatisfaction, drive for muscularity, and MD characteristics as outcomes (Y1-Y3); and (b) the mediating effects of self-compassion (M1) to explain the relations between conformity to masculine norms (X1) and body dissatisfaction, drive for muscularity, and MD characteristics as outcomes (Y1-Y3) were examined.

The current study tested a fully saturated model in which all possible paths were estimated to test the specific set of hypothesized relations. Therefore, instead of applying fit index values (i.e., CFI, RMSEA, SRMR, and χ^2) as indicators of model quality, the magnitude of path coefficients and variance accounted for in criterion variables were used. Examining all of the variables in one path model simultaneously allowed for each variable's unique direct effects and indirect effects of predictors and mediators to be examined. Finally, it is important to note that multicollinearity among variables was analyzed with results indicating that variance was not inflated (VIF=1.21-2.34; Bowerman & O'Connell, 1990).

The unstandardized direct path coefficients and errors are depicted in Figure 4.1, whereas a summary of the indirect effects appear in Tables 4.2, 4.3, and 4.4. To more formally estimate the indirect effects, 1,000 bias-corrected and accelerated bootstrapped samples were utilized to examine the significance of indirect effects (Kline, 2005). The bootstrapped unstandardized indirect path coefficients, and 95% bias-corrected confidence intervals are reported. If the 95% confidence interval does not contain zero,

then the indirect effects are considered significant.

Unique Direct Relations. With regard to direct relations when all variables were included in the model (See Figure 4.1), a positive direct relation emerged between conformity to traditional masculine norms and GRC. There was no direct relation between conformity to traditional masculine norms and self-compassion. However, there was a positive direct relation between conformity to traditional masculine norms and body dissatisfaction, a positive direct relation between conformity to traditional masculine norms and drive for muscularity, and a positive direct relation between conformity to traditional masculine norms and MD characteristics.

Moreover, a negative direct relation was found between GRC and self-compassion. However, there were no direct relations found between GRC and (a) body dissatisfaction, (b) drive for muscularity, and (c) MD characteristics. Altogether, the model explained 35.5% of the variance in gender role conflict scores. With regard to self-compassion, there were no direct relations with (a) body dissatisfaction, (b) drive for muscularity, and (c) MD characteristics. Altogether, the model explained 2.9% of the variance in self-compassion scores.

Furthermore, a positive direct relation appeared between body dissatisfaction and drive for muscularity. However, there was no direct relation between body dissatisfaction and MD characteristics. Altogether, the model explained 19.5% of variance in body dissatisfaction scores. Finally, there was a positive direct relation between drive for muscularity and MD characteristics. Altogether, the model explained 34.4% of the variance in drive for muscularity scores, and 57.3% in MD scores.

Indirect Relations. To test the proposed model, the total and specific indirect

effects of conformity to masculine norms, GRC, self-compassion, body dissatisfaction, drive for muscularity, and MD characteristics were investigated. As shown in Table 4.2, the total and specific indirect effect of body dissatisfaction on MD characteristics through drive for muscularity were significant. Next, the total indirect effect of GRC on MD characteristics through self-compassion, body dissatisfaction, and drive for muscularity was significant but the specific indirect effect was non-significant. Moreover, the total indirect effect of self-compassion on MD characteristics through GRC, body dissatisfaction, and drive for muscularity was significant. However, the only significant specific indirect effect was the effect of self-compassion on MD characteristics through drive for muscularity and body dissatisfaction. Finally, the total indirect effect of conformity to traditional masculine norms on MD characteristics through GRC, self-compassion, body dissatisfaction, and drive for muscularity was significant. However, the specific indirect effect of conformity to traditional masculine norms on MD characteristics through drive for muscularity was the only specific indirect effect to emerge.

Indirect Path	B	95% Confidence Interval	
		Upper Bound	Lower Bound
MBAS → MASS (Total Indirect)	.180*	0.109	0.251
MBAS → DMS → MASS	.180*	0.109	0.251
GRCS-SF → MASS (Total Indirect)	.117*	0.006	0.237
GRC-SF → MBAS → MASS	.017	-0.09	0.062
GRC-SF → DMS → MASS	.064	-0.027	0.156
GRC-SF → MBAS → DMS → MASS	.036	-0.009	0.092
SCS → MASS (Total Indirect)	-.113*	-0.209	-0.016
SCS → MBAS → MASS	-.039	-0.108	0.014
SCS → DMS → MASS	.012	-0.086	0.093
SCS → MBAS → DMS → MASS	-.086*	-0.144	-0.040
CMNI-46 → MASS (Total Indirect)	.495*	0.234	0.754
CMNI-46 → SCS → MASS	.041	-0.013	0.106
CMNI-46 → MBAS → MASS	.003	-0.047	0.051
CMNI-46 → GRCS-SF → MASS	.038	-0.0136	0.210
CMNI-46 → DMS → MASS	.210*	0.024	0.443
CMNI-46 → SCS → MBAS → MASS	.014	-0.005	0.051
CMNI-46 → GRCS-SF → MBAS → MASS	.022	-0.012	0.080
CMNI-46 → SCS → DMS → MASS	-.004	-0.040	0.034
CMNI-46 → MBAS → DMS → MASS	.007	-0.090	0.088
CMNI-46 → GRCS-SF → DMS → MASS	.084	-0.037	0.212
CMNI-46 → SCS → MBAS → DMS → MASS	.031	-0.004	0.069
CMNI-46 → GRCS-SF → MBAS → DMS → MASS	.048	-0.012	0.122

Note: *Confidence intervals that do not contain zero are considered significant (Mallinckrodt, Abraham, Wei, and Russell, 2006). Also, left indented columns represent total indirect and indented columns represent specific indirect effects. Conformity to Masculine Norms Inventory-46 (CMNI-46; 0= *strongly disagree*, 3= *strongly agree*), Gender Role Conflict Scale-Short Form (GRCS-SF; 1= *strongly disagree*, 6= *strongly agree*), Self-Compassion Scale (SCS; 1= *almost never*, 5= *almost always*), Male Body Attitudes Scale (MBAS; 1= *never*, 6= *always*), Drive for Muscularity Scale (DMS; 1= *never*, 6= *always*), Muscle Appearance Satisfaction Scale (MASS; 1= *definitely disagree*, 5= *definitely agree*).

Next, as depicted in table 4.3, the total and specific indirect effect of conformity to traditional masculine norms on drive for muscularity through self-compassion, GRC, and body dissatisfaction was non-significant. Next, the total and specific indirect effects of GRC on drive for muscularity through self-compassion and body dissatisfaction were non-significant. Next, the total indirect effect of self-compassion on drive for muscularity through GRC and body dissatisfaction was significant. Also, the specific indirect effect of self-compassion on drive for muscularity through body dissatisfaction was significant. Finally, as depicted in Table 4.4, the total and specific indirect effect of conformity to traditional masculine norms on body dissatisfaction through self-compassion and GRC was non-significant.

Table 4.3
Bootstrap Analysis of Magnitude and Significance of Total and Specific Indirect Effects for Drive for Muscularity

Indirect Path	B	95% Confidence Interval	
		Upper Bound	Lower Bound
CMNI-46 → DMS (Total Indirect)	.425*	0.041	0.803
CMNI-46 → SCS → DMS	-.011	-0.110	0.084
CMNI-46 → MBAS → DMS	.019	-0.229	0.229
CMNI-46 → GRC-SF → DMS	.216	-0.091	0.517
CMNI-46 → SCS → MBAS → DMS	.079	-0.009	0.180
CMNI-46 → GRC-SF → MBAS → DMS	.123	-0.030	0.311
GRC-SF → DMS (Total Indirect)	.093	-0.024	0.235
GRC-SF → MBAS → DMS	.093	-0.024	0.235
SCS → DMS (Total Indirect)	-.219*	-0.366	-0.102
SCS → MBAS → DMS	-.219*	-0.366	-0.102

Note: *Confidence intervals that do not contain zero are considered significant (Mallinckrodt, Abraham, Wei, and Russell, 2006). Also, left indented columns represents total indirect and indented columns represent specific indirect effects. Conformity to Masculine Norms Inventory-46 (CMNI-46; 0= *strongly disagree*, 3= *strongly agree*), Gender Role Conflict Scale-Short Form (GRCS-SF; 1= *strongly disagree*, 6= *strongly agree*), Self-Compassion Scale (SCS; 1= *almost never*, 5= *almost always*), Male Body Attitudes Scale (MBAS; 1= *never*, 6= *always*), Drive for Muscularity Scale (DMS; 1= *never*, 6= *always*).

Table 4.4

Bootstrap Analysis of Magnitude and Significance of Total and Specific Indirect Effects for Body Dissatisfaction

Indirect Path	B	95% Confidence Interval	
		Upper Bound	Lower Bound
CMNI-46→MBAS (Total Indirect)	.439*	0.063	0.789
CMNI-46→SCS→MBAS	.172	-0.021	0.364
CMNI-46→GRCS-SF→MBAS	.267	-0.078	0.621

Note: *Confidence intervals that do not contain zero are considered significant (Mallinckrodt, Abraham, Wei, and Russell, 2006). Also, left indented columns represents total indirect and indented columns represent specific indirect effects. Conformity to Masculine Norms Inventory-46 (CMNI-46; 0= *strongly disagree*, 3= *strongly agree*), Gender Role Conflict Scale-Short Form (GRCS-SF; 1= *strongly disagree*, 6= *strongly agree*), Self-Compassion Scale (SCS; 1= *almost never*, 5= *almost always*), Male Body Attitudes Scale (MBAS; 1= *never*, 6= *always*).

Mediation. Finally, hypotheses five and six were examined in order to determine if GRC (M1) and self-compassion (M2) mediated the relationship between conformity to traditional masculine norms (X1), and body dissatisfaction (Y1), drive for muscularity (Y2), and MD characteristics (Y3). In order to test the two mediational hypotheses, Baron and Kenny's (1986) analytic approach for mediation were conducted. According to the procedures, the first step is to determine if there is a correlation between the predictor (X) and outcome variable (Y). The second step is to determine if there is a correlation between the predictor variable (X) and the mediator (M). The third step involves an establishment of a relationship between the mediator variable (M) and the outcome variable (Y) when the predictor variable is controlled for. The final step is to determine an establishment of the complete mediation across the variables, meaning that the effect of the predictor variable (X) on the outcome variable (Y) while controlling for the mediator variable (M) is zero. In summary, if all four steps of Baron and Kenny's (1986) procedures are met, then the data is consistent with the mediational hypothesis. If, however, only the first three steps of Baron and Kenny's (1986) procedures are satisfied, then partial mediation is observed in the data if the relationship between the predictor variable (X) and the outcome variable (Y) is diminished with the inclusion of the mediator variable (M).

After the application of Baron and Kenny's (1986) principles, regarding mediation of the relation between conformity to traditional masculine norms (X1) and body dissatisfaction, drive for muscularity, and MD characteristics (Y1-3), the indirect effect of GRC (M1) emerged as non-significant, inconsistent with hypothesis 5 (see Figure 4.1). Also, regarding mediation of the relation between conformity to traditional

masculine norms (X1) and body dissatisfaction, drive for muscularity, and MD characteristics (Y1-3), the indirect effect of self-compassion (M1) emerged as non-significant, inconsistent with hypothesis 6 (see Figure 4.1). Finally, although not part of the original hypotheses, it is important to note regarding mediation of the relation between GRC and self-compassion (X1, X2) and drive for muscularity (Y1), the indirect effect of body dissatisfaction (M1) emerged as non-significant. However, regarding mediation of the relation between body dissatisfaction (X1) and MD characteristics (Y1), the indirect effect of drive for muscularity (M1) emerged as significant.

In summary, this chapter described and summarized the results and the statistical analyses used to evaluate the research questions and hypotheses. Data preparation and screening procedures were articulated and each hypothesis was addressed in the order presented in the previous chapters. The next chapter will provide an overview of the current study, practice and research implications based off of the results, directions for future research, and limitations of the current study.

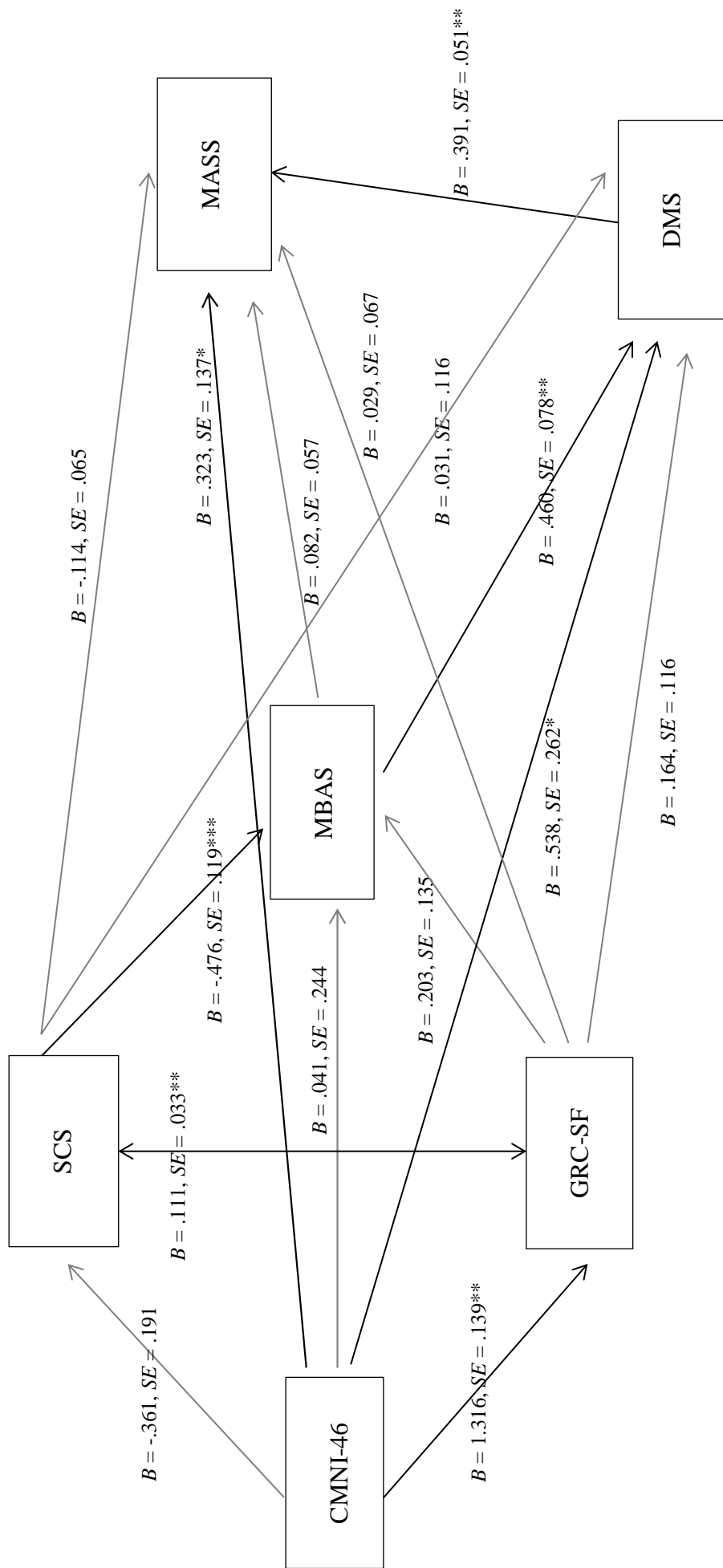


Figure 4.1. Empirical model of relations. Values represent the unstandardized coefficients and standard errors in parentheses. CMNI-46=Conformity to Traditional Masculine Norms; GRC-SF=Gender Role Conflict; SCS=Self-Compassion; MBAS=Body Dissatisfaction; DMS=Drive for Muscularity; MASS=Muscle Dysmorphia Characteristics. * $p < .05$, ** $p < .01$.

Chapter V

Discussion

With regard to men's health, there is a growing concern pertaining to the physical, emotional, and psychological influences of body image for college-aged men living in the United States. Mostly, college-aged men are experiencing increased levels of muscularity focused body dissatisfaction, are endorsing higher levels of drive for muscularity, and are more willing to engage in characteristics indicative of muscle dysmorphia (MD; e.g., excessive exercise, anabolic steroid use, extreme performance enhancement drug use, body checking behaviors, decreased social supports) in pursuit of the muscular ideal (e.g., Cafri et al., 2005; Davey & Bishop, 2006; McCreary et al., 2005; Muth & Cash, 1997). Consequently, more men are entering university counseling centers with these concerns and are relying on mental health professionals for quality care. Thus, it is critical for mental health professionals and researchers to better understand men's body image in order to appropriately assess, diagnose, conceptualize, and intervene.

The present study added to the limited men's body image literature by (a) elucidating the relationship between masculine ideology, gender role conflict (GRC), self-compassion, body image, drive for muscularity, MD characteristics, and weight lifting practices among college-aged men; (b) determining if GRC mediated the relationship between masculine ideology, body dissatisfaction, drive for muscularity, and MD characteristics; and (c) determining if self-compassion mediated the relationship between masculine ideology, body dissatisfaction, drive for muscularity, and MD characteristics. Additionally, this study served as the first known examination of the application of self-compassion in men as a protective factor against negative body image.

This chapter will discuss the results of the study presented in the previous chapter and their potential implications. First, findings of the research hypotheses will be discussed. Next, research and practice implications along with directions for future research will be considered. Finally, limitations of the current study will be presented.

Review of Findings

During the development of the current research study, it was expected that there would be significant correlations among the variables under investigation. Specifically, it was predicted that there would be significant positive correlations between GRC and (a) traditional masculine ideology; (b) body dissatisfaction; (c) drive for muscularity; and (d) MD characteristics. Secondly, it was predicted that there would be significant negative correlations between self-compassion and (a) traditional masculine ideology; (b) body dissatisfaction; (c) drive for muscularity; and (d) MD characteristics. Third, it was predicted that there would be a significant negative correlation between GRC and self-compassion. Also, it was predicted that there would be significant positive correlations between the amount of days men weight lift and (a) traditional masculine ideology; (b) GRC; (c) body dissatisfaction; (d) drive for muscularity; (e) MD characteristics, and a significant negative correlation between the amount of days men weight lift and (f) self-compassion. Finally, it was expected that both GRC and self-compassion would both mediate the relationship between traditional masculine ideology and (a) body dissatisfaction; (b) drive for muscularity; and (c) MD characteristics.

Based on a cross-sectional correlational research design (Heppner, Wampold, & Kivlighan, 2008), several promising results emerged from this study that confirmed many of the studies hypotheses. The results of the study illustrate that the aforementioned

variables are highly correlated with one another; however, no mediation among the variables emerged. The following is a review of the outcomes of the study with specific respect to the hypotheses.

Hypothesis 1. With regard to hypotheses 1a-1d, which examined the relationship between GRC and traditional masculine ideology, body dissatisfaction, drive for muscularity, and MD characteristics, results from the current study validated the hypotheses, as there were significant positive correlations among all variables. Particularly, scores on the GRCS-SF scale were significant and positively correlated with scores on the CMNI-46, MBAS, DMS, and MASS scales. Therefore, the current study demonstrated that as levels of GRC within college-aged men increase, so do their views on traditional male gender socialization, their levels of body dissatisfaction, their desire to become more muscular, and their engagement in characteristics indicative of MD characteristics.

These findings are consistent with previous research examining GRC with respect to gender socialization, body image, and drive for muscularity. For example, Uy et al. (2014) found significant positive correlations between GRC and traditional masculine ideologies in a sample of college-aged men and determined that both constructs predicted male drinking behaviors. Secondly, Murray and Lewis (2014) found that traditional masculine ideology and gender role conflict have a significant positive relationship with men's level of body dissatisfaction and MD. Also, the authors concluded that GRC indeed plays an instrumental role in the development of body image dissatisfaction. Finally, in a sample of 176 college men, Shepherd and Rickard (2012) found that GRC was positively correlated with drive for muscularity, and that GRC mediated the

relationship between drive for muscularity and help-seeking behaviors. Interestingly, this is the first known research study to both examine and determine a significant positive relationship between GRC and MD characteristics, thus adding to the literature.

Hypothesis 2. With regard to hypothesis 2a, which examined the relationship between self-compassion and traditional masculine ideology, although the relationship was negative in nature, it was non-significant. This result is inconsistent with previous literature as Reilly et al. (2014) found that self-compassion was significantly negatively correlated with masculine norms adherence. However, with regard to hypotheses 2b-2d, which examined the relationship between scores on self-compassion and body dissatisfaction, drive for muscularity, and MD characteristics, results from the current study validated the hypotheses, as there were significant negative correlations among all variables. Particularly, scores on the SCS scale were significant and negatively correlated with scores on the MBAS, DMS, and MASS scales. Therefore, the current study demonstrated that as levels of self-compassion within college-aged men increase, their levels of body dissatisfaction, their desire to become more muscular, and their engagement in characteristics indicative of MD symptomology decrease.

These findings regarding self-compassion are new to the literature of men and masculinity as it pertains to body image, drive for muscularity, and MD. However, there are some empirical studies that are consistent with previous research examining self-compassion/self-esteem, body image, and drive for muscularity. For example, Braun, Park, and Gorin (2016) conducted a meta-analysis and found that across various study designs, there was a significant negative correlation between self-compassion and negative body image and eating pathology. However, it is important to note that the

samples in these prior studies consisted of a predominately college-aged females.

Therefore, there are limited studies investigating self-compassion serving as a protective barrier against negative body image and appearance driven behaviors in men. However, the current study is one of the first in attempting to understand this relationship in men.

Moreover, other research studies have used men in their samples, but examined variables closely related to self-compassion. For example, Chaney (2008) found a significant negative correlation between MD characteristics and self-esteem in a sample of college-aged men. Also, Lavender, Gratz, and Anderson (2012) found that mindfulness, a construct that is similar to self-compassion, was positively correlated with positive body image and negatively correlated with drive for muscularity among a sample of college men. However, although both studies examined positive psychological constructs in self-esteem and mindfulness and found significant correlations to the reduction of drive for muscularity and increase in body satisfaction, no studies have examined how self-compassion relates to the aforementioned constructs. Prominently, this is one of the first studies to demonstrate relationships between self-compassion and body dissatisfaction, drive for muscularity, and MD characteristics.

Hypothesis 3. With regard to hypothesis 3, which examined the relationship between self-compassion and gender role conflict, the current study demonstrated a significant negative correlation between the two constructs, validating the hypothesis. Particularly, scores on the SCS were significantly and negatively correlated with scores on the GRCS-SF. Therefore, the current study established that as levels of self-compassion within college-aged men increase, their level of gender role conflict decrease.

This finding serves as a significant contribution to the literature pertaining to gender socialization as this is one of the first studies to demonstrate a significant relationship between self-compassion and gender role conflict in a sample of college-aged men. This finding is critical as it begins to bring attention to potential protective factors that may assist men in reducing the amount of GRC that they are exposed to in an attempt to increase their mental health and overall well-being. Previously, GRC research has focused on identifying constructs and factors that may facilitate GRC in men, but few studies have examined ways to mitigate this type of distress. From these initial findings, attention can be directed to this area of inquiry and continue to not only identify other potential protective factors to GRC, but to also further examine the relationship between self-compassion and GRC in order to better understand how these two constructs influence one another.

Hypothesis 4. With regard to hypotheses 4a-4f, which examined the relationship between the amount of days men weight lift and traditional masculine ideology, gender role conflict, self-compassion, body dissatisfaction, drive for muscularity, and MD characteristics, mixed results were found. Particularly, the current study found a significant positive correlation between the amount of day's men weight lift and (a) conformity to traditional masculine norms; (b) gender role conflict; (c) drive for muscularity; and (d) MD characteristics. More specifically, the number of days men reported weight lifting were significantly and positively correlated with scores on the CMNI-46, GRCS-SF, DMS, and MASS scales. Therefore, the current study demonstrated that as the number of days that men reported weight lifting increase, so do

their levels of conformity to traditional masculine norms, GRC, drive for muscularity, and MD characteristics.

These findings are consistent with previous research examining drive for muscularity and MD characteristics among men who weight lift compared to men who do not. For example, research has linked excessive bodybuilding with characteristics indicative of drive for muscularity and MD. Tod and Edwards (2015) conducted a meta-analysis and reviewed 77 studies in order to examine the relationships between exercise behavior, exercise dependence, and drive for muscularity in males. The authors found an average effect size that was significant between weight training, exercise dependence, and drive for muscularity. Moreover, McCreary and Sasse (2000) found that increasing body mass is an important quality for young men and that bodybuilding practices among men are on the rise. Also, Hallsworth, Wade, and Tiggeman (2005) found that compared to a control sample, men who engaged in weight lifting had significantly higher levels of drive for muscularity compared to men who did not engage in weight lifting practices. Finally, Mosley (2009) illustrated how bodybuilding practices impact the onset of MD by interviewing a man diagnosed with MD. According to the man, *“I am very serious about my training; if I haven’t pushed myself to the limit then I feel like I’ve wasted my time. If the gym is crowded and I can’t complete all the exercises in my program then I get really irritable”* (p.194).

However, contrary to hypotheses 4c and 4f, no significant correlations were found between the number of days men lift weights and their levels of self-compassion and body dissatisfaction. This is contrary to what other research studies have found, as Hallsworth et al. (2005) demonstrated that compared to a control sample, men who

engaged in weight lifting had significantly higher levels of body dissatisfaction compared to a control sample. It is important to note that of the sample for the current study, a majority of the participants documented that they did not weight lift. Therefore, power could have been an issue and this may explain the non-significant correlation between weight training, self-compassion, and body dissatisfaction.

The current study adds to the literature as there have been limited studies designed to examine the relationship between weight training and traditional masculine ideology, self-compassion, and GRC. Since the study demonstrated significant positive correlations between weight training and both traditional masculine ideology and GRC, results indicate that indeed there are relationships that need further exploring. Finally, although the correlation between weight training and self-compassion was non-significant, power may have also been an issue due to the limited amount of men in the sample that engaged in weight lifting.

Hypotheses 5 and 6. Regarding hypotheses 5 and 6, which tested a mediation model associating conformity to traditional masculine norms with body dissatisfaction, drive for muscularity, and MD characteristics, identifying both GRC and self-compassion as mediators of this relation, mixed results emerged. Foremost, positive direct relations emerged between conformity to traditional masculine norms and (a) GRC; (b) body dissatisfaction; (c) drive for muscularity; and (d) MD characteristics. Moreover, there was a negative direct relation between GRC and self-compassion. Also, a positive direct relation appeared between body dissatisfaction and drive for muscularity. Finally, there was a positive direct relation between drive for muscularity and MD characteristics. All other relations were non-significant.

With regard to indirect effects between the variables, the total and specific indirect effects of body dissatisfaction on MD characteristics through drive for muscularity were significant. Also, the total indirect effect of GRC on MD characteristics through self-compassion, body dissatisfaction, and drive for muscularity was significant. Moreover, the total indirect effect of self-compassion on MD characteristics through GRC, body dissatisfaction, and drive for muscularity was significant. However, the only significant specific indirect effect was the effect of self-compassion on MD characteristics through drive for muscularity and body dissatisfaction. Finally, the total indirect effect of conformity to traditional masculine norms on MD characteristics through GRC, self-compassion, body dissatisfaction, and drive for muscularity was significant. However, the specific indirect effect of conformity to traditional masculine norms on MD characteristics through drive for muscularity was the only specific indirect effect to emerge. The total and specific indirect effect of conformity to traditional masculine norms on drive for muscularity through self-compassion, GRC, and body dissatisfaction was non-significant. Next, the total indirect effect of self-compassion on drive for muscularity through GRC and body dissatisfaction was significant. Finally, the specific indirect effect of self-compassion on drive for muscularity through body dissatisfaction was significant.

Finally, after testing the two mediational hypotheses using Baron and Kenny's (1986) analytic approach to mediation, the indirect effect of GRC (M1) and self-compassion (M2) did not mediate the relation between conformity to traditional masculine norms (X1) and body dissatisfaction, drive for muscularity, and MD characteristics (Y1-3). Although no mediations were present, the direct effects and

total/specific indirect effects demonstrate that important relationships exist between conformity to traditional masculine norms, GRC, self-compassion, body dissatisfaction, drive for muscularity, and MD characteristics. The lack of statistically significant support for the model, as measured in the current research, is potentially due to a few reasons.

First, issues pertaining to power are the first potential reason. Particularly, the sample size was not robust, thus impacting significant results. Secondly, there may have been an issue with the various measures used in this study. All of the measures used are interpreted by summing the item scores for each subscale and then summing the subscale scores to create a total score. For all measures, higher scores indicate higher levels of traditional masculine ideology, GRC, self-compassion, body dissatisfaction, drive for muscularity, and MD characteristics. However, it is not clear the number of items that need to be endorsed in order for the threshold to be observed. Also, there may be other constructs, not examined in this study, which may serve as mediators. For example, constructs such as self-objectification, body shame, minority stress, the role of family, friends, and romantic partner, and childhood bullying experiences are just a few of the constructs not examined in this study that may also mediate the relationship between traditional masculine ideology and body dissatisfaction, drive for muscularity, and MD characteristics. Finally, for the purposes of this study, only total scores were used in the data analysis. Not using specific subscale scores could have impacted the results as there may be particular subscales of GRC or Self-Compassion that served as mediators.

Implications for Research

Results of the current study provide important implications for future research and muscularity-focused body image prevention among men. Particularly, there was

confirmation that gender socialization indeed has a significant relationship to men's attitudes about their physical appearance. Also, the results are aligned with previous literature, which has demonstrated strong positive relationships between body dissatisfaction, drive for muscularity, and MD characteristics. Interestingly, this is one of the first studies that attempted to understand if gender role conflict mediated the relationship between gender socialization and muscularity-focused body dissatisfaction in a sample of college-aged men. Finally, this is one of the first studies designed to understand the relationship self-compassion has in reducing gender role conflict, body dissatisfaction, drive for muscularity, and engagement in MD characteristics.

From the results, there are important implications for future research. Since this study was exploratory in nature, other research designs need to be implemented in order to better understand the constructs examined and those that were not (e.g., self-objectification, minority stress, body shame, quality of relationships with partner and friends). Prominently, since this study was a cross-sectional correlational research design, causality was not able to be determined. Therefore, future research needs to employ experimental research methodologies in order to better understand and explain cause and effect among the variables. To do this, it will be necessary for researchers to conduct both within and between groups experimental designs in which they can control for potential nuisance variables.

For example, having an experimental group of men induced to experience varying levels of gender role conflict to determine the effect it has on their levels of body dissatisfaction, drive for muscularity, and engagement in MD characteristics compared to a control group will be necessary. Also, having an experimental group be exposed to the

concept of self-compassion and apply it in their life to determine if doing so will significantly reduce levels of body dissatisfaction, drive for muscularity, and MD characteristics, compared to the control group, would also be essential. Finally, future research should examine groups of men who meet criteria for MD compared to men who do not in order to better understand if and how gender role conflict serves as a facilitator of MD characteristics and self-compassion serves as a protective factor.

Future research should also employ other research methodologies to better understand this phenomenon. Particularly, qualitative research designs should be implemented in order to provide a complex picture of muscularity focused body image distress among men in a way that quantitative methodologies cannot explore or examine. For example, future qualitative research studies should implement various data collection methods (e.g., observation, in-depth interviewing, life histories, narrative inquiries, and digital storytelling; Marshall & Rossman, 2011) in order to provide a better understanding as to how this problem emerges in boys and young men.

It is important to note that a limitation from this study is that data was collected among a sample of men aged 19-26 years old. It is important to note that individuals who fall into this age range are young men and do not represent the views and values of men who are in different developmental stages of life. As men grow older, their goals and values may change thus impacting their masculinity ideology and body image. Particularly, compared to young men aged 19-26, older men are more established in their career, have more financial stability, have a higher chance of creating, fostering, and maintaining a long-term relationship with a partner, and are able to create a home and family of their own. Experiencing these salient milestones could potentially impact the

way men express their gender along with their body image compared to young men who have not experienced the aforementioned developmental milestones. Therefore, in order to establish a more complete understanding of muscularity body image concerns among men, future research should employ quantitative and qualitative research comparing and contrasting men from various age ranges. Also, longitudinal studies should be employed to understand the developmental markers that impact the development of muscularity focused body image distress in men.

Moreover, future research should collect information among a diverse sample of men living in the United States. Particularly, it would be important to gather data from men from various ages, disability statuses, religious identities, ethnicities, social classes, careers, sexual orientations, level of education, indigenous backgrounds, and national origins in order to generate a more complex understanding of men's muscularity focused body image concerns. Also, future research should explore these constructs among individuals who identify as gay and individuals who were not born and raised in the United States but have moved here. This future research is particularly important because men who identify as gay or who are from a different country grow up with different appearance standards of what is desirable. Therefore, research incorporating these populations can provide a more complex understanding of the pressures that men face in obtaining appearance ideals. Also, from the research, researchers and clinicians may have a better understanding of the unique pressures that these men face and can better assess and intervene.

Finally, future research should seek to understand the influence of culture on men's body image, understanding how male role models impact body image and help-

seeking behaviors among men with MD characteristics, and how relationships, career, and self-esteem are impacted by negative body image, drive to obtain muscularity, and MD characteristics in order to develop and implement prevention programs geared to increasing positive body image among boys and men.

Implications for Practice

Men with muscularity-focused body image distress experience a range of unhealthy behaviors and cognitive distortions that often lead to symptoms of depression, low self-esteem, and even suicidal ideation (Kimmel & Mahalik, 2004). Considering the results of this study, there are significant implications for future practice. With an increase of men seeking mental health services, it is critical that providers are adequately assessing for muscularity-focused body dissatisfaction in order to implement effective treatment. Particularly, mental health providers must address specific behaviors (e.g., binge eating, dieting, excessive exercising) and cognitive distortions (e.g., fixation on the ideal body image) while helping men acknowledge and normalize the concept of body image dissatisfaction. From a holistic perspective, both prevention and intervention strategies are needed to help men realize that they may have body image problems and to assist professionals in appropriately recognizing the symptoms that may be overlooked.

Traditionally, men enter counseling for reasons other than concerns about their appearance. O'Dea and Abraham (2002) found that when men see a counselor or physician, many of them deny having negative body image or do not understand the seriousness of their symptoms. Therefore, developing a close, trusting relationship with a male client who has muscularity-focused body image dissatisfaction is an essential first step in the counseling process because of the stigma associated with a man having body

image concerns or a related disorder (Stewart, 2004). When this alliance has been established and a thorough assessment pertaining to body image has been conducted, a treatment plan can be developed using appropriate intervention strategies.

When planning appropriate interventions, an essential first step in providing counseling services to men is to offer psychoeducation, as many men do not understand the dynamics of body image dissatisfaction or a drive for muscularity (Harvey & Robinson, 2003). Psychoeducation strategies can take numerous forms; (a) bibliotherapy; (b) education from another professional (e.g., dietician or medical physician); and (c) discussions about the effects of negative body image (Greenhill, 2003). Maida and Armstrong (2005) have also reported that cognitive restructuring and disputing irrational beliefs are important interventions, and are commonly reported by other professionals as being effective in working with men experiencing these concerns.

Moreover, helpful techniques in working with men include: (a) relaxation training; (b) exposure techniques; (c) assertion training; (d) behavior modification techniques to reinforce a healthier lifestyle; and (e) self-monitoring techniques (Choate, 2007). Other interventions that have been effective include: (a) mindfulness meditation; (b) self-monitoring and journaling; (c) mirror exposure (d) motivational interviewing techniques; and (e) pharmacotherapy (Grieve et al., 2009). Finally, other efficacious interventions that can be employed include: (a) exposure to more appropriate male role models; (b) reinforcement of other nonphysical activities; (c) mentoring programs; (d) life skills training; and (e) connecting with one's values and setting goals and clarifying what value(s) is (are) underlying those goals (Choate, 2007).

Limitations

The results of the present study must be interpreted in the context of its limitations. First, the sample size for this study was smaller than expected. In the planning stages, it was anticipated that up to 200 valid cases of men would be included in the data analysis. However, only having 154 valid cases could have impacted the results since there were significant direct and indirect relations, but no mediation. Also, there was a lack of diversity from the sample obtained. The sample gathered for this study was predominantly White, not in a current romantic relationship, were in college, and identified their religion as Catholic. The lack of diversity in the sample limits how the findings of this study can be generalized to the larger population of men with muscularity-focused body image concerns living in the United States.

A second limitation is that the direction of causality cannot be inferred from the present cross-sectional design. Ethical considerations preclude researchers to implement research designs that would increase men's preoccupation with their own muscularity due to the various negative consequences (e.g., steroid use, excessive exercise, supplement use) already noted in the literature. Consequently, research designs that are used to describe instead of explain offers the best evidence available to guide theory development.

Also, although the study was administered online which provided anonymity, the use of self-report measures increased the possibility of responses being influenced by social desirability from the participants. Moreover, another important limitation is the possibility of selection bias in the sample, since most of the active recruitment strategies consisted of visiting college classrooms; this may have inadvertently selected a group of men who may not represent the general population. It may be that most of the participants

did not have much interest in weight lifting, dieting, taking performance enhancement supplements and use anabolic steroids, which may have significantly impacted the results.

Moreover, the majority of the sample consisted of students attending a four year university who were involved in a fraternity, which may have confounded the results. It will be important for future research to engage in different recruitment strategies in order to obtain a more diverse sample of men. Particularly, future research should compare and contrast students attending a four year university with students attending other training programs (e.g., community college, associates program, vocational program) along with non-students. Additionally, future research should compare fraternity vs. non-fraternity members. Doing so will provide researchers with a deeper understanding of muscularity focused body image distress among college-aged men.

Instrumentation used in the study serves as another limitation. Prominently, the results demonstrated that the model only explained 2.9% of the variance in self-compassion scores. This can be argued as the most important finding from this study. This result suggests that the self-compassion scale might not be capturing what it is trying to measure or it may indicate that self-compassion may look different for men compared to women. Historically, the SCS has been used with primarily female samples and the items in the measure tend to work in opposition of the toxic masculinity scripts that young boys and men are taught when younger. For the most part, women are socialized to be caring, understanding, empathic, and forgiving of themselves and of others. However, young boys and men are not socialized to enact these traits with others and this may be a foreign concept for many boys and men. Therefore, future research should

employ qualitative research methodologies in order to better understand self-compassion and how it is similar and different between men and women. From there, new items can be generated and factor analysis can be completed to develop a new measure of self-compassion for use with male samples.

Moreover, there are significant measurement limitations of the MASS (Mayville et al., 2002). Historically, as stated earlier in this chapter, MD measurement tools are interpreted by summing the item scores for each subscale, with higher scores indicating higher characteristics associated with MD. Conversely, it is not clear the number of characteristics that need to be experienced by an individual in order to develop MD (Olivardia, 2001). Future research studies need to gather more data from clinical samples in order to establish appropriate cutoff scores to guide interpretation of the measure. Also, the cutoffs can then be used to identify men who may be at risk of developing MD.

Conclusion

The current study aimed to add to the muscularity-focused body image literature by examining relations between gender socialization, self-compassion, and muscularity-focused body image constructs, including body dissatisfaction, drive for muscularity, and MD characteristics). From this, the study aimed to provide a roadmap for future research endeavors and clinical implications for mental health professionals working with college-aged men who present to counseling with body dissatisfaction, drive for muscularity, and MD characteristics. Moreover, this study aimed to explore the relationship that self-compassion, a positive psychology variable, and GRC have on the aforementioned constructs. Results of the study suggest that gender socialization (i.e., traditional masculine ideology and GRC) is positively related to body dissatisfaction, drive for

muscularity, and MD characteristics. Also, results indicate that self-compassion is negatively related to body dissatisfaction, drive for muscularity, and MD characteristics. However, neither self-compassion nor GRC mediated the relationship between traditional masculine ideology and body dissatisfaction, drive for muscularity, and MD characteristics.

This study provides a number of clinical implications for work with college-aged men experiencing muscularity-focused body dissatisfaction. Given the disparate number of college men that utilize services when experiencing mental health concerns (Robertson, 2005), the present study provides a foundation for future studies in the field of body image, men and masculinity, and positive psychology. Researchers and clinicians are encouraged to examine men's muscularity-focused body image distress through the lens of gender socialization, and aim to implement more interventions that mitigate this distress, one potentially being the teaching of self-compassion in an effort to close the gender gap in the diagnosis and treatment of eating disorders and body image.

References

- Adams, G., Turner, H., & Bucks, R. (2005). The experience of body dissatisfaction in men. *Body Image, 2*, 271-283.
- Addis, M. E., Mansfield, A. K., & Syzdek, M. R. (2010). Is 'masculinity' a problem?: Framing the effects of gendered social learning in men. *Psychology of Men & Masculinity, 11*, 77-90. doi:10.1037/a0018602
- Agliata, D., & Tantleff-Dunn, S. (2004). The impact of media exposure on males' body image. *Journal of Social And Clinical Psychology, 23*, 7-22.
doi:10.1521/jscp.23.1.7.26988
- Albertson, E. R., Neff, K. D., & Dill-Shackleford, K. E. (2015). Self-compassion and body dissatisfaction in women: A randomized controlled trial of a brief meditation intervention. *Mindfulness, 6*, 444-454. doi:10.1007/s12671-014-0277-3
- Alexander, D. (2004, February). Bulk up. *Muscle and Fitness, 76-80*.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Anderson, A., Cohn, L., & Holbrook, T. (2000). Making weight, Men's conflicts with food weight, shape & appearance. Carlsbad.
- Arbour, K. & Martin Ginis, K. (2006). Effects of exposure to muscular and hypermuscular media images on young men's muscularity dissatisfaction and body dissatisfaction. *Body Image, 3*, 153-161.
- Baird, A. L., & Grieve, F. G. (2006). Exposure to male models in advertisements leads to a decrease in men's body satisfaction. *North American Journal of Psychology, 8*, 115-122.

- Bahrke, M. S. (2007). Muscle enhancement substances and strategies. In J. K. Thompson, & Cafri, G. (Eds.). *The muscular ideal: Psychological, social, and medical perspectives* (pp. 141-160). Washington, DC: American Psychological Association.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality And Social Psychology, 51*, 1173-1182. doi:10.1037/0022-3514.51.6.1173
- Bartlett, C. P., & Harris, R. J. (2008). The impact of body emphasizing video games on body image concerns in men and women. *Sex Roles, 59*, 586-601. doi: 10.1007/s11199-008-9457-8.
- Bartlett, C. P., Vowels, C. L., & Saucier, D. A., (2008). Meta-analyses of the effects of media images on men's body-image concerns. *Journal of Social and Clinical Psychology, 27*, 279-310.
- Beck, J. G., McNiff, J., Clapp, J. D., Olsen, S. A., Avery, M. L., & Hagewood, J. H. (2011). Exploring negative emotion in women experiencing intimate partner violence: Shame, Guilt, and PTSD. *Behavior Therapy, 42*, 740-750. doi:10.1016/j.beth.2011.04.001
- Berger, J. M., Levant, R., McMillan, K. K., Kelleher, W., & Sellers, A. (2005). Impact of Gender Role Conflict, Traditional Masculinity Ideology, Alexithymia, and Age on Men's Attitudes Toward Psychological Help Seeking. *Psychology of Men & Masculinity, 6*, 73-78. doi:10.1037/1524-9220.6.1.73

- Blashill, A. J., & Wilhelm, S. (2014). Body Image distortions, weight, and depression in adolescent boys: Longitudinal trajectories into adulthood. *Psychology of Men and Masculinity, 15*, 445-451. Doi:10.1037/a0034618
- Blazina, C., & Watkins, C. R. (1996). Masculine gender role conflict: Effects on college men's psychological well-being, chemical substance usage, and attitudes towards help-seeking. *Journal of Counseling Psychology, 43*, 461-465.
doi:10.1037/0022-0167.43.4.461
- Blazina, C., Settle, A. G., & Eddins, R. (2008). Gender role conflict and separation-individuation difficulties: Their impact on college men's loneliness. *The Journal of Men's Studies, 16*, 69-81. doi:10.3149/jms.1601.69
- Blouin, A. G., & Goldfield, G. S. (1995). Body image and steroid use in male bodybuilders. *International Journal of Eating Disorders, 18*, 159-165.
- Bohan, J. S. (1993). Regarding gender: Essentialism, constructionism, and feminist psychology. *Psychology of Women Quarterly, 17*, 5-21. doi:10.1111/j.1471-6402.1993.tb00673.x
- Bordo, S. (1999). *The male body: A new look at men in public and in private*. New York: Farrar, Straus, and Giroux.
- Bowerman, B. L., & O'Connell, R. T. (1990). *Linear statistical models: An applied approach* (2nd ed.). Belmont, CA: Duxbury.
- Bramon-Bosch, E., Troop, N. A., & Treasure, J. L. (2000). Eating disorders in males: A comparison with female patients. *European Eating Disorders Review, 8*, 321-328.
- Brannon, R., & Juni, S. (1984). A scale for measuring attitudes about masculinity. *Psychological Documents, 14*, 6-7.

- Braun, T. D., Park, C. L., & Gorin, A. (2016). Self-compassion, body image, and disordered eating: A review of the literature. *Body Image, 17*, 117-131.
doi:10.1016/j.bodyim.2016.03.003
- Breiding, M. J. (2004). Observed Hostility and Dominance as Mediators of the Relationship Between Husbands' Gender Role Conflict and Wives' Outcomes. *Journal of Counseling Psychology, 51*, 429-436. doi:10.1037/0022-0167.51.4.429
- Breines, J., Toole, A., Tu, C., & Chen, S. (2014). Self-compassion, body image, and self-reported disordered eating. *Self and Identity, 13*, 432-448.
doi:10.1080/15298868.2013.838992
- Brennan, M. A., Lalonde, C. E., & Bain, J. L. (2010). Body image perceptions: Do gender differences exist? *Psi Chi Journal of Undergraduate Research, 15*, 130-138.
- Brooks, G. R. (1998). *A new psychotherapy for traditional men*. San Francisco: Jossey-Bass.
- Brownell, K. D., Steen, S. N., & Wilmore, J. (1987). Weight regulation practices in athletes: Analysis of metabolic health effects. *Medicine and Science in Sports and Exercise, 19*, 546-566.
- Burlew, L. D., & Shurts, W. (2013). Men and body image: Current issues and counseling implications. *Journal of Counseling & Development, 91*, 428-435.
- Cafri, G., Thompson, J. K., Ricciardelli, L., McCabe, M., Smolak, L., & Yesalis, C. (2005). Pursuit of the muscular ideal: Physical and psychological consequences and putative risk factors. *Clinical Psychology Review, 25*, 215-239.
Doi:1.1016/j.cpr.2004.09.003

- Cameron, J., & Landau, J. (Producers), & Cameron, J. (Director). (2009). Avatar [Motion picture]. United States: Twentieth Century-Fox Film Corporation.
- Campbell, J. C. (2002). Health consequences of intimate partner violence. *The Lancet*, 359, 1331-1336.
- Capodilupo, C. M., & Forsyth, J. M. (2014). Consistently inconsistent: A review of the literature on eating disorders and body image among women of color. In M. L. Miville, A. D. Ferguson, M. L. Miville, A. D. Ferguson (Eds.), *Handbook of race-ethnicity and gender in psychology* (pp. 343-359). New York, NY, US: Springer Science + Business Media. doi:10.1007/978-1-4614-8860-6_16
- Cash, T. F. (2002). Cognitive-behavioral perspectives on body image. In T. F. Cash and T. Pruzinsky (Eds.). *Body image: A handbook of theory, research, and clinical practice* (pp. 38-46). New York: Guilford.
- Cash, T. F. (2004). Body image: Past, present, and future. *Body Image*, 1, 1-5. doi:10.1016/S1740-1445(03)00011-1
- Cash, T. (2008). *The Body Image Workbook*. New York, NY: New Harbinger.
- Centers for Disease Control and Prevention. (2013). *Leading causes of death in males United States, 2013* [Table]. Retrieved from <http://www.cdc.gov/men/lcod/2013/index.htm>
- Chaney, M. P. (2008). Muscle dysmorphia, self-esteem, and loneliness among gay and bisexual men. *International Journal of Men's Health*, 7, 157-170. doi:10.3149/jmh.0702.157
- Choate, L. (2007). Counseling adolescent girls for body image resilience: Strategies for school counselors. *Professional School Counseling*, 10, 317-326.

- Chrisler, J. C., & Cochran, S. V. (2007). The Muscular Ideal: Future Directions and Closing Comments. In J. K. Thompson, G. Cafri (Eds.) *The muscular ideal: Psychological, social, and medical perspectives* (pp. 237-242). Washington, DC, US: American Psychological Association. doi:10.1037/11581-012
- Chung, B. (2001). Muscle dysmorphia: a critical review of the proposed criteria. *Perspectives in Biology and Medicine*, *44*, 565-574.
- Cohn, A. M., Zeichner, A., & Seibert, L. A. (2008). Labile affect as a risk factor for aggressive behavior in men. *Psychology of Men & Masculinity*, *9*, 29 –39.
- Cohn, A. M., Jakupcak, M., Seibert, L. A., Hildebrandt, T. B., & Zeichner, A. (2010). The role of emotion dysregulation in the association between men's restrictive emotionality and use of physical aggression. *Psychology of Men & Masculinity*, *11*, 53-64. doi:10.1037/a0018090
- Connan, F. (1998). Machismo nervosa: An ominous variant of bulimia nervosa. *European Eating Disorders Review*, *6*, 154-159. doi:10.1002/(SICI)1099-0968(199809)6:3<154::AID-ERV257>3.0.CO;2-S
- Connell, R. W. (1987). *Gender & power*. Stanford: Stanford University Press.
- Corson, P. W., & Andersen, A. E. (2002). Body image issues among boys and men. In T. F. Cash and T. Pruzinsky (Eds.). *Body image: A handbook of theory, research, and clinical practice* (pp. 192-199). New York: Guilford.
- Costin, C. (2007). *The eating disorder sourcebook: A comprehensive guide to the causes, treatments, and prevention of eating disorders* (3rd ed.). New York: McGraw Hill.
- Crocker, J. (2002). The costs of seeking self-esteem. *Journal of Social Issues*, *58*, 597-615. doi:10.1111/1540-4560.00279

- Crosby, A. E., Han, B., Ortega, L. A. G., Parks, S. E., & Gfroerer, J. (2011). Suicidal thoughts and behaviors among adults aged 18 years: United States, 2008–2009. *Morbidity and Mortality Weekly Report, 60*, 1–22.
- Cross, S. E., & Madson, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin, 122*, 5–37. doi:10.1037/0033-2909.122.1.5
- Davey, C.M., & Bishop, J.B. (2006). Muscle dysmorphia among college men: An emerging gender-related counseling concern. *Journal of College Counseling, 9*, 171–180. doi:10.1002/j.2161-1882.2006.tb00104.x
- David, D. S. & Brannon, R. (1976). *The Forty-nine percent majority: The male sex role*. Reading, MA: Addison-Wesley.
- Delgado-Romero, E. A., Lau, M. Y., & Shullman, S. L. (2012). The Society of Counseling Psychology: Historical values, themes, and patterns viewed from the American Psychological Association presidential podium. In N. A. Fouad, J. A. Carter, L. M. Subich (Eds.), *APA handbook of counseling psychology, vol. 1: Theories, research, and methods* (pp. 3–29). Washington, DC: American Psychological Association.
- Diedrich, A., Grant, M., Hofmann, S. G., Hiller, W., & Berking, M. (2014). Self-compassion as an emotion regulation strategy in major depressive disorder. *Behaviour Research and Therapy, 5*, 843–51. doi:10.1016/j.brat.2014.05.006
- Eaton, D. K., Kann, L., Kinchen, S., Shanklin, S., Flint, K. H., Hawkins, J., Harris, W. A., Lowry, R., McManus, T., Chyen, D., Whittle, L., Lim, C., & Wechsler, H. (2012). Youth risk behavior surveillance—United States, 2011. *Morbidity and*

Mortality Weekly Report, 61, 1-167. Retrieved from

<http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf>

- Eisler, R. M., & Skidmore, J. R. (1987). Masculine gender role stress: Scale development and component factors in the appraisal of stressful situations. *Behavior Modification*, 11, 123–136.
- Eisler, R. M. (1995). The relationship between masculine gender role stress and men's health risk: The validation of a construct. In R. F. Levant, W. S. Pollack (Eds.), *A new psychology of men* (pp. 207-225). New York, NY US: Basic Books.
- Englar-Carlson, M. (2006). Masculine norms and the therapy process. In M. Englar-Carlson & M.A. Stevens (Eds.), *In the room with men: A casebook of therapeutic change* (pp. 13-47). Washington, DC: American Psychological Association.
- Enns, C. (2000). Gender issues in counseling. In S. Brown & R. Lent (Eds.), *Handbook of counseling psychology* (3rd. ed., pp. 601-638). New York, NY: Wiley.
- Farquhar, J. C., & Wasylkiw, L. (2007). Media images of men: Trends and consequences of body conceptualization. *Psychology of Men & Masculinity*, 8, 145-160. doi: 10.1037/1524-9220.8.3.145
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117-140.
- Fredrick, D. A., Fessler, D. M. T., & Hazelton, M. G. (2005). Do representations of male muscularity differ in men's and women's magazines? *Body Image*, 2, 81-86.
- Fredrickson, B. L., & Roberts, T. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21, 173-206. doi:10.1111/j.1471-6402.1997.tb00108.x

- Frith, H., & Gleeson, K. (2004). Clothing and embodiment: Men managing body image and appearance. *Psychology of Men and Masculinity, 5*, 40-48.
- Gadalla, T. M. (2009). Eating disorders in men: A community-based study. *International Journal of Men's Health, 8*, 72-81. doi:10.3149/jmh.0801.72
- Galdas, P. M., Cheater, F., & Marshall, P. (2005). Men and health help seeking behaviors: Literature review. *Journal of Advanced Nursing, 49*, 616 – 623. doi:10.1111/j.1365-2648.2004.03331.x
- Galli, N., & Reel, J. J. (2009). Adonis or Hephaestus? Exploring body image in male athletes. *Psychology of Men & Masculinity, 10*, 95-108. doi:10.1037/a0014005
- Ganem, P. A., de Heer, H., & Morera, O. F. (2009). Does body dissatisfaction predict mental health outcomes in a sample of predominantly Hispanic college students? *Personality and Individual Differences, 46*, 557-561. doi:10.1016/j.paid.2008.12.014
- Garman, J. F., Hayduk, D. M., Crider, D. A., & Hodel, M. M. (2004). Occurrence of exercise dependence in a college-aged population. *Journal of American College Health, 52*, 221-228.
- Gattario, K. H., Frisén, A., Fuller-Tyszkiewicz, M., Ricciardelli, L. A., Diedrichs, P. C., Yager, Z., Franko, D. L., & Smolak, L. (2015). How is men's conformity to masculine norms related to their body image? Masculinity and muscularity across Western countries. *Psychology of Men & Masculinity, 16*, 337-347. doi:10.1037/a0038494
- Gerson, J. M., & Peiss, K. (1985). Boundaries, negotiation, consciousness: Reconceptualizing gender relations. *Social Problems, 32*(4), 317-331. doi:10.1525/sp.1985.32.4.03a00020

- Goldberg, H. (1976). *The hazards of being male: Surviving the myth of masculine privilege*. Oxford, England: Nash.
- Goldberg, H. (1977). *The hazards of being male*. New York, NY: New American Library.
- Goldberg, L., & Elliot, D. L. (2007). The prevention of anabolic steroid use among adolescents. In J. K. Thompson, & Cafri, G. (Eds.). *The muscular ideal: Psychological, social, and medical perspectives* (pp. 161-180). Washington, DC: American Psychological Association.
- Good, G. E., Sherrod, N., & Dillon, M. (2000). Masculine gender role stressors and men's health. In R. Eisler & M. Hersen (Eds.), *Handbook of gender, culture, and health* (pp.63-81). Mahway, NJ: Erlbaum.
- Gilbert, P., & Procter, S. (2006). Compassionate Mind Training for People with High Shame and Self-Criticism: Overview and Pilot Study of a Group Therapy Approach. *Clinical Psychology & Psychotherapy*, *13*, 353-379. doi:10.1002/cpp.507
- Graef, S. T., Tokar, D. M., & Kaut, K. P. (2010). Relations of masculinity ideology, conformity to masculine role norms, and masculine gender role conflict to men's attitudes toward and willingness to seek career counseling. *Psychology of Men & Masculinity*, *11*, 319-333. doi:10.1037/a0019383
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment*, *26*, 41-54.
- Gray, J. J., & Ginsberg, R. L. (2007). Muscle dissatisfaction: An overview of

- psychological and cultural research and theory. In J. K. Thompson, & Cafri, G. (Eds.). *The muscular ideal: Psychological, social, and medical perspectives* (pp. 15-40). Washington, DC: American Psychological Association.
- Greenhill, W. D. (2003). Loving Adonis: Could your man suffer from disordered eating? *American Fitness, 21*, 29-31.
- Grieve, F. G., Newton, C. C., Kelley, L., Miller Jr., R. C., & Kerr, N. A. (2005). The preferred male body shapes of college men and women. *Individual Differences Research, 3*, 188-192.
- Grieve, F. G. (2007). A Conceptual Model of Factors Contributing to the Development of Muscle Dysmorphia. *Eating Disorders: The Journal of Treatment & Prevention, 15*, 63-80. doi:10.1080/10640260601044535
- Grieve, F. G., & Helmick, A. (2008). The influence of men's self-objectification on the drive for muscularity: Self-esteem, body satisfaction and muscle dysmorphia. *International Journal of Men' Health, 7*, 288-298. doi: 10.3146/jmh.0703.288
- Grieve, F. G., Truba, N., & Bowersox, S. (2009). Etiology, assessment, and treatment of muscle dysmorphia. *Journal of Cognitive Psychotherapy, 23*, 306-314. doi:10.1891/08898391.23.4.30
- Grieve, F. G., & Shacklette, M. D. (2012). Brief report on men's bodies & mood: Correlates between depressive symptoms & muscle dysmorphia symptoms. *North American Journal of Psychology, 14*, 563-568.
- Griffiths, L. J., Wolke, D., Page, A. S., & Horwood, J. P. (2006). Obesity and bullying: different effects for boys and girls. *Archives of Disease in Childhood, 91*, 121-125.

- Grogan, S., & Richards, H. (2002). Body image: Focus groups with boys and men. *Men and Masculinities*, 4, 219-232. doi:10.1177/1097184X02004003001
- Grossbard, J. R., Lee, C. M., Neighbors, C., & Larimer, M. E. (2009). Body image concerns and contingent self-esteem in male and female college students. *Sex Roles*, 60, 198-207. doi:10.1007/s11199-008-9535-y
- Grubbs, J. B., Volk, F., Exline, J. J., & Pargament, K. I. (2015). Internet pornography use: Perceived addiction, psychological distress, and the validation of a brief measure. *Journal of Sex & Marital Therapy*, 41, 83-106. doi:10.1080/0092623X.2013.842192
- Grubner, G., & Gross, L. (1976). The scary world of the TV's heavy viewer. *Psychology Today*, 10, 41-45.
- Gueguen, J., Godart, N., Chambry, J., Brun-Eberentz, A., Foulon, C., Divac, S. M., & ... Huas, C. (2012). Severe anorexia nervosa in men: Comparison with severe an in women and analysis of mortality. *International Journal of Eating Disorders*, 45, 537-545. doi:10.1002/eat.20987
- Hallsworth, L., Wade, T., & Tiggemann, M. (2005). Individual differences in male body-image: An examination of self-objectification in recreational body builders. *British Journal of Health Psychology*, 10, 453-465. doi:10.1348/135910705X26966
- Hammond, W. P. (2012). Taking it like a man: Masculine role norms as moderators of the racial discrimination-depressive symptoms association among African American men. *American Journal of Public Health*, 102, S232-S241. doi:10.2105/AJPH.2011.300485

- Hargreaves, D. A., & Tiggemann, M. (2009). Muscular ideal media images and men's body image: Social comparison processing and individual vulnerability. *Psychology of Men & Masculinity, 10*, 109-119. doi:10.1037/a0014691
- Harvey, J. A., & Robinson, J. D. (2003). Eating disorders in men: Current considerations. *Journal of Clinical Psychology in Medical Settings, 10*, 297-306. doi: 1068-9583/03/1200-0297/0
- Hausenblas, H. A., & Downs, D. S. (2002). Exercise dependence: A systematic review. *Psychology of Sport And Exercise, 3*, 89-123. doi:10.1016/S1469-0292(00)00015-7
- Hausenblas, H. A., Janelle, C. A., Gardner, R. E., & Hagan, A. L. (2003). Affective responses of high and low body satisfied men to viewing physique slides. *Eating Disorders, 11*, 101-113. doi:10.1080/10640260390199299
- Hatoum, I. J., & Belle, D. (2004). Mags and abs: Media consumption and bodily concerns in men. *Sex Roles, 51*, 397-407.
- Hayes, J. A., & Mahalik, J. R. (2000). Gender role conflict and psychological distress in male counseling center clients. *Psychology of Men and Masculinity, 1*, 116-125.
- Hefner, V., Woodward, K., Figge, L., Bevan, J. L., Santora, N., & Baloch, S. (2014). The influence of television and film viewing on midlife women's body image, disordered eating, and food choice. *Media Psychology, 17*, 185-207. doi:10.1080/15213269.2013.838903

- Heinberg, L. J., & Thompson, J. (1992). Social comparison: Gender, target importance ratings, and relation to body image disturbance. *Journal of Social Behavior & Personality*, 7, 335-344.
- Heppner, P. P., Wampold, B. E., & Kivlighan, D. M. (2008). *Research design in counseling* (3rd ed.) Belmont, CA: Brooks Cole.
- Hepton, B. (Director). (2005). *The Man Whose Arms Exploded* [Motion picture]. United States: The Learning Channel (TLC).
- Hill, M. S., & Fischer, A. R. (2001). Does entitlement mediate the link between masculinity and rape-related variables? *Journal of Counseling Psychology*, 48, 39-50. doi:10.1037/0022-0167.48.1.39
- Hiraoka, R., Meyer, E. C., Kimbrel, N. A., DeBeer, B. B., Gulliver, S. B., & Morissette, S. B. (2015). Self-compassion as a prospective predictor of PTSD symptom severity among trauma-exposed U.S. Iraq and Afghanistan war veterans. *Journal of Traumatic Stress*, 28, 127-133. doi:10.1002/jts.21995
- Hobza, C. L., Walker, K. E., Yakushko, O., & Peugh, J. L. (2007). What about men? Social comparison and the effects of media images on body and self-esteem. *Psychology of Men & Masculinity*, 8, 161-172.
- Hobza, C. L., & Rochlen, A. B. (2009). Gender role conflict, drive for muscularity, and the impact of ideal media portrayals on men. *Psychology of Men & Masculinity*, 10, 120-130. doi:10.1037/a0015040
- Houle, J., Mishara, B. L., & Chagnon, F. (2008). An empirical test of a mediational

model of impact of the traditional male gender role on suicidal behavior in men.

Journal of Affective Disorders, 107, 37-43. Doi:10.1016/j.jad.2007.07.016

Jackson, L. A. (2002). Physical attractiveness: A socio-cultural perspective. In T. F. Cash & T. Pruzinsky (Ed.), *Body image: A handbook of theory, research and clinical practice* (pp. 13-21). New York: Guilford Press.

Jacobson, C. M., Marrocco, F., Kleinman, M., & Gould, M. S. (2011). Restrictive emotionality, depressive symptoms, and suicidal thoughts and behaviors among high school students. *Journal of Youth and Adolescence*, 40, 656-665.
doi:10.1007/s10964-010-9573-y

Jonason, P. K., Kremer, M., & Sohn, S. (2009). Male body image: The role of muscle magazine exposure, body mass index, and social comparison in men's body satisfaction. *Social Behavior and Personality*, 37, 627-630. doi:10.2224/sbp.2009.37.5.627

Jordan, J. V. (1997). Relational development: Therapeutic implications of empathy and shame. In J. V. Jordan, J. V. Jordan (Eds.), *Women's growth in diversity: More writings from the Stone Center* (pp. 138-161). New York, NY, US: Guilford Press.

Kanayama, G., Pope, H. G., Cohane, G., & Hudson, J. I. (2003). Risk factors for anabolic-androgenic steroid use among weightlifters: A case control study. *Drug and Alcohol Dependence*, 71, 77-86. doi:10.1016/S0376-8716(03)00069-3

Kanayama, G., Brower, K. J., Wood, R. I., Hudson, J. I., & Pope, H. G. (2009). Issues for DSM-V: Clarifying the diagnostic criteria for anabolic-androgenic steroid dependence. *The American Journal of Psychiatry*, 166, 642-644.
doi:10.1176/appi.ajp.2009.08111699

- Karazsia, B. T., & Crowther, J. H. (2009). Social body comparison and internalization: Mediators of social influences on men's muscularity-oriented body dissatisfaction. *Body Image, 6*, 105-112. doi:10.1016/j.bodyim.2008.12.003.
- Kashubeck-West, S., & Tagger, L. (2013). Feminist multicultural perspectives on body image and eating disorders in women. In C. Z. Enns, E. N. Williams, C. Z. Enns, E. N. Williams (Eds.), *The Oxford handbook of feminist multicultural counseling psychology* (pp. 392-410). New York, NY, US: Oxford University Press.
- Kelly, N. R., Cotter, E. W., Tanofsky-Kraff, M., & Mazzeo, S. E. (2015). Racial variations in binge eating, body image concerns, and compulsive exercise among men. *Psychology of Men & Masculinity, 16*, 326-336. doi:10.1037/a0037585
- Kimmel, M. S., (1986). Introduction: Toward men's studies. *American Behavioural Scientist, 29*, 517-529.
- Kimmel, M. S., & Messner, M. (1989). Introduction. In M. S. Kimmel & M. Messner (Eds.), *Men's lives* (pp. 1-14). New York: Macmillan.
- Kimmel, M. S. (2003). Masculinity as homophobia: Fear, shame, and silence in the construction of gender identity. In T. E. Ore (Ed.). *The construction of difference & inequality: Race, class, gender, and sexuality* (pp. 119-136). New York, NY: McGraw-Hill.
- Kimmel, S. B., & Mahalik, J. R. (2004). Measuring Masculine Body Ideal Distress: Development of a measure. *International Journal of Men's Health, 3*, 1-10. doi:10.3149/jmh.0301.1
- Kimmel, M. S. (2010). Masculinity as homophobia: Fear, shame, and silence in the construction of gender identity. In S. R. Harper, F. I. Harris, S. R. Harper, F. I. Harris

- (Eds.), *College men and masculinities: Theory, research, and implications for practice* (pp. 23-31). San Francisco, CA, US: Jossey-Bass.
- Kitayama, S., & Markus, H. R. (2000). The pursuit of happiness and the realization of sympathy: Cultural patterns of self, social relations, and well-being. In E. Diener, E. M. Suh, E. Diener, E. M. Suh (Eds.), *Culture and subjective well-being* (pp. 113-161). Cambridge, MA, US: The MIT Press.
- Klein, A. M. (1993). *Little big men: Bodybuilding subculture and gender construction*. Suny Press.
- Klein, A. M. (2007). Size matters: Connecting subculture to culture in bodybuilding. In J. K. Thompson, & Cafri, G. (Eds.), *The muscular ideal: Psychological, social, and medical perspectives* (pp. 67-84). Washington, DC: American Psychological Association.
- Klein, J. (2012). *The bully society: School shootings and the crises of bullying in America's schools*. New York, NY: New York University Press.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York, NY: Guilford Press.
- Kramer, A., Lorenzon, D., & Mueller, G. (2004). Prevalence of intimate partner violence and health implications for women using emergency departments and primary care clinics. *Women's Health Issues, 14*, 19-29.
- Kupers, T. A. (2001). Psychotherapy with men in prison. In G. R. Brooks, G. E. Good, G. R. Brooks, G. E. Good (Eds.), *The new handbook of psychotherapy and counseling*

with men: A comprehensive guide to settings, problems, and treatment approaches, Vol. 1 & 2 (pp. 170-184). San Francisco, CA, US: Jossey-Bass.

- Labre, M. P. (2002). Adolescent boys and the muscular male body ideal. *Journal of Adolescent Health, 30*, 233-242. doi:10.1016/S1054-139X(01)00413-X
- Labre, M. P. (2005). Burn fat, build muscle: A content analysis of Men's Health and Men's Fitness. *International Journal of Men's Health, 4*, 187-200.
- Lavender, J. M., Gratz, K. L., & Anderson, D. A. (2012). Mindfulness, body image, and drive for muscularity in men. *Body Image, 9*, 289-292.
doi:10.1016/j.bodyim.2011.12.002
- Leit, R. A., Pope, H. G., & Gray, J. J. (2000). Cultural expectations of muscularity in men: The evolution of Playgirl centerfolds. *International Journal of Eating Disorders, 29*, 90-93.
- Leit, R. A., Pope, H. R., & Gray, J. J. (2001). Cultural expectations of muscularity in men: The evolution of Playgirl centerfolds. *International Journal of Eating Disorders, 29*, 90-93. doi:10.1002/1098-108X(200101)29:1<90::AID-EAT15>3.0.CO;2-F
- Levant, R. F. (1996). The new psychology of men. *Professional Psychology: Research and Practice, 27*, 259-265. doi:10.1037/0735-7028.27.3.259
- Levant, R. F. (1997). Nonrelational sexuality in men. In R. Levant & G. Brooks (Eds.), *Men and sex: New psychological perspectives* (pp. 9-27). New York: Wiley.
- Levant, R. F., & Richmond, K. (2007). A review of research on masculinity ideologies using the Male Role Norms Inventory. *The Journal of Men's Studies, 15*, 130-146.
doi:10.3149/jms.1502.130

- Levant, R. F. (2011). Research in the psychology of men and masculinity using the gender role strain paradigm as a framework. *American Psychologist*, *66*, 765-776. doi:10.1037/a002503
- Lorenzen, L. A., Grieve, F. G., & Thomas, A. (2004). Exposure to Muscular Male Models Decreases Men's Body Satisfaction. *Sex Roles*, *51*, 743-748. Doi:10.1007/s11199-004-0723-0
- Lu, A., & Wong, Y. J. (2013). Stressful experiences of masculinity among U.S.-born and immigrant Asian American men. *Gender & Society*, *27*, 345-371.
- Luciano, L. (2001). *Looking good: Male body image in modern America*. New York, NY: Hill and Wang.
- Luciano, L. (2007). Muscularity and masculinity in the United States: A historical overview. In J. K. Thompson, & Cafri, G. (Eds.). *The muscular ideal: Psychological, social, and medical perspectives* (pp. 41-66). Washington, DC: American Psychological Association.
- Magovcevic, M., & Addis, M. E. (2005). Linking Gender-Role Conflict to Nonnormative and Self-Stigmatizing Perceptions of Alcohol Abuse and Depression. *Psychology of Men & Masculinity*, *6*, 127-136. doi:10.1037/1524-9220.6.2.127
- Mahalik, J. R., & Cournoyer, R. J. (2000). Identifying gender role conflict messages that distinguish mildly depressed from nondepressed men. *Psychology of Men & Masculinity*, *1*, 109-115. doi:10.1037/1524-9220.1.2.109
- Mahalik, J. R., Good, G. E., & Englar-Carlson, M. (2003a). Masculinity scripts, presenting concerns, and help seeking: Implications for practice and training. *Professional Psychology: Research and Practice*, *34*, 123-131. doi:10.1037/0735-

7028.34.2.123

- Mahalik, J. R., Locke, B. D., Ludlow, L. H., Freitas, G. (2003b). Development of the Conformity to Masculine Norms Inventory. *Psychology of Men & Masculinity, 4*, 3-25. doi:10.1037/1524-9220.4.1.3
- Maida, D. M., & Lee Armstrong, S. (2005). The Classification of Muscle Dysmorphia. *International Journal of Men's Health, 4*, 73-91. doi:10.3149/jmh.0401.73
- Mallinckrodt, B., Abraham, W., Wei, M., & Russell, D. W. (2006). Advances in testing the statistical significance of mediation effects. *Journal of Counseling Psychology, 53*, 372-378. doi:10.1037/0022-0167.53.3.372
- Malsow, A. H. (1954). *Motivation and personality*. New York, NY: Harper & Row.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological review, 98*, 224.
- Marshall, C., & Rossman, G. B. (2011). *Designing qualitative research* (5th ed.). Los Angeles, CA: SAGE.
- Marshall, S. L., Parker, P. D., Ciarrochi, J., Sahdra, B., Jackson, C. J., & Heaven, P. L. (2015). Reprint of 'self-compassion protects against the negative effects of low self-esteem: A longitudinal study in a large adolescent sample'. *Personality and Individual Differences, 81*, 201-206. doi:10.1016/j.paid.2014.09.049
- Mayville, S. B., Williamson, D. A., White, M. A., Netemeyer, R. G. & Drab, D. L. (2002). Development of the muscle appearance satisfaction scale: A self report measure for the assessment of muscle dysmorphia symptoms. *Assessment, 9*, 351-360. doi:10.1177/1073191102238156
- McCabe, M. P., & Ricciardelli, L. A. (2004). Body image dissatisfaction among males

- across the lifespan: A review of past literature. *Journal of Psychosomatic Research*, 56, 675-685. doi:10.1016/S0022-3999(03)00129-6
- McCreary, D. R., & Sasse, D. K. (2000). An exploration of the drive for muscularity in adolescent boys and girls. *Journal of American College Health*, 48, 297-304. doi:10.1080/07448480009596271
- McCreary, D. R., Saucier, D. M., & Courtenay, W. H. (2005) The drive for muscularity and masculinity: Testing the associations among gender-role traits, behaviors, attitudes, and conflict. *Psychology of Men & Masculinity*, 6, 83-94. doi:10.1037/1524-9220.6.2.83
- McDermott, R. C., & Lopez, F. G. (2013). College men's intimate partner violence attitudes: Contributions of adult attachment and gender role stress. *Journal of Counseling Psychology*, 60, 127-136. doi:10.1037/a0030353
- McKelley, R. A., & Rochlen, A. B. (2010). Conformity to masculine norms and preferences for therapy or executive coaching. *Psychology of Men & Masculinity*, 11, 1-14. doi:10.1037/a0017224
- McCabe, M. P., Ricciardelli, L. A., & Finemore, J. (2002). The role of puberty, media and popularity with peers on strategies to increase weight, decrease weight and increase muscle tone among adolescent boys and girls. *Journal of Psychosomatic Research*, 52, 145-154. doi:10.1016/S0022-3999(01)00272-0
- McCabe, M. P., & Ricciardelli, L. A. (2004). Body image dissatisfaction among males across the lifespan: A review of past literature. *Journal of Psychosomatic Research*, 56, 675-685. doi:10.1016/S0022-3999(03)00129-6
- McCreary, D. R., & Sasse, D. K. (2000). An exploration of the drive for muscularity in

adolescent boys and girls. *Journal of American College Health*, 48, 297–304.

doi:10.1080/07448480009596271

McCreary, D. R., Saucier, D. M., & Courtenay, W. H. (2005) The drive for muscularity and masculinity: Testing the associations among gender-role traits, behaviors, attitudes, and conflict. *Psychology of Men & Masculinity*, 6(2), 83-94.

doi:10.1037/1524-9220.6.2.83

Menees, L., Grieve, F. G., Mienaltowski, A., & Pope, J. (2013). Critical comments about the body and muscle dysmorphia symptoms in collegiate men. *International Journal of Men's Health*, 12, 17-28. doi:10.3149/jmh.1201.17

Michaels, M. S., Parent, M. C., & Moradi, B. (2013). Does exposure to muscularity-idealizing

images have self-objectification consequences for heterosexual and sexual minority men?

Psychology of Men & Masculinity, 14, 175-183. doi:10.1037/a0027259

Minton, T. D., & Zeng, Z. (2015). *Jail inmates at midyear 2014*. Bureau of Justice Statistics. Retrieved from <http://www.bjs.gov/content/pub/pdf/jim14.pdf>

Mishkind, M. E., Rodin, J., Silberstein, L. R., & Striegel-Moore, R. H. (1987). The embodiment of masculinity: Cultural, psychological, and behavioral dimensions. In M. S. Kimmel (Ed.), *Changing men: New directions in research on men and masculinity* (pp. 37-52). Thousand Oaks, CA, US: Sage Publications, Inc.

Morgan, R. (2002, September 27). The men in the mirror. *The Chronicle of Higher Education*, pp. A53-A54.

- Morgan, J. F. (2008). *The invisible man: A self-help guide for men with eating disorders, compulsive exercise and bigorexia*. New York, NY, US: Routledge/Taylor & Francis Group.
- Mosley, P. E. (2009). Bigorexia: Bodybuilding and muscle dysmorphia. *European Eating Disorders Review*, *17*, 191-198. doi:10.1002/erv.897
- Murray, S. B., Rieger, E., Touyz, S. W., & De la Garza García, Y. (2010). Muscle dysmorphia and the DSM-V conundrum: Where does it belong? A review paper. *International Journal of Eating Disorders*, *43*, 483-491. doi:10.1002/eat.20828
- Murray, T., & Lewis, V. (2014). Gender-role conflict and men's body satisfaction: The moderating role of age. *Psychology of Masculinity*, *15*, 40-48.
Doi:10.1037/a0030959
- Mussap, A. J. (2008). Masculine gender role stress and the pursuit of muscularity. *International Journal of Men's Health*, *7*, 72-89. doi:10.3149/jmh.0701.72
- Muth, J. L., & Cash, T. F. (1997). Body-image attitudes: What difference does gender make?
Journal of Applied Social Psychology, *27*, 1438-1452. doi:10.1111/j.1559-1816.1997.tb01607.x
- Muthén, L.K. and Muthén, B.O. (1998-2012). Mplus User's Guide. Seventh Edition. Los Angeles, CA: Muthén & Muthén
- Myers, T. A., & Crowther, J. H. (2009). Social comparison as a predictor of body dissatisfaction: A meta-analytic review. *Journal of Abnormal Psychology*, *118*, 683-698. doi:10.1037/a0016763.

- National Institutes on Drug Abuse (2000). NIDA announces multimedia public education initiative aimed at reversing rise in use of anabolic steroids by teens. Available online at <http://www.nih.gov/news/pr/apr2000/nida-14.htm>; accessed August 24, 2015.
- Neely, M. E., Schallert, D. L., Mohammed, S. S., Roberts, R. M., & Chen, Y. (2009). Self-kindness when facing stress: The role of self-compassion, goal regulation, and support in college students' well-being. *Motivation and Emotion, 33*, 88-97.
doi:10.1007/s11031-008-9119-8
- Neff, K. D. (2003a). Self-Compassion: An Alternative Conceptualization of a Healthy Attitude Toward Oneself. *Self and Identity, 2*, 85-101. doi:10.1080/15298860309032
- Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*, 223-250. Doi:10.1080/15298860309027.
- Neff, K. D., Kirkpatrick, K., & Rude, S. S. (2007). Self-compassion and its link to adaptive psychological functioning. *Journal of Research in Personality, 41*, 139-154.
doi: 10.1016/j.jrp.2006.03.004
- Neff, K. D., & McGehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity, 9*, 225-240.
doi:10.1080/15298860902979307
- Neff, K. D., & Pommier, E. (2013). The relationship between self-compassion and other-focused concern among college undergraduates, community adults, and practicing meditators. *Self and Identity, 12*, 160-176. doi:10.1080/15298868.2011.649546
- Norwalk, K. E., Vandiver, B. J., White, A. M., & Englar-Carlson, M. (2011). Factor structure of the gender role conflict scale in African American and European

American men. *Psychology of Men & Masculinity*, 12, 128-143.

doi:10.1037/a0022799

O'Dea, J. A., & Abraham, S. (2000). Improving the body image, eating attitudes, and behaviors

of young male and female adolescents: A new educational approach that focuses on self-esteem. *International Journal of Eating Disorders*, 28, 43-75.

doi:10.1002/(SICI)1098-

108X(200007)28:1<43::AID-EAT6>3.0.CO;2-D

O'Dea, J. A., & Abraham, S. (2002). Eating and exercise disorders in young college men. *Journal of American college health*, 50, 273-278.

Olivardia, R., Pope, H. G., & Hudson, J. I. (2000). Muscle dysmorphia in male weightlifters:

A case-control study. *American Journal of Psychiatry*, 157, 1291-1296.

doi:10.1176/appi.ajp.157.8.1291

Olivardia, R. (2001). Mirror, mirror on the wall, who's the largest of them all? The features and phenomenology of muscle dysmorphia. *Harvard Review of Psychiatry*, 9, 254-259. doi:10.1080/10673220127900

Olivardia, R., Pope, H. G., Borowiecki, J. J., & Cohane, G. H. (2004). Biceps and body image: The relationship between muscularity and self-esteem, depression, and eating disorder symptoms. *Psychology of Men and Masculinity*, 5, 112-120.

doi:10.1037/1524-9220.5.2.112

- One Hundred Eighth United States Congress. (2004). Anabolic Steroid Control Act of 2004. Available online at <http://www.gpo.gov/fdsys/pkg/BILLS-108s2195enr/pdf/BILLS-108s2195enr.pdf>; accessed August 24, 2015.
- O'Neil, J. M. (1981a). Male sex role conflicts, sexism, and masculinity: Psychological implications for men, women, and the counseling psychologist. *The Counseling Psychologist*, *9*, 61-80. doi:10.1177/001100008100900213
- O'Neil, J. M. (1981b). Patterns of gender role conflict and strain: Sexism and fear of femininity in men's lives. *Personnel & Guidance Journal*, *60*, 203-210.
- O'Neil, J. M. (1982). Gender role conflict and strain in men's lives: Implications for psychiatrists, psychologists, and other human service providers. In K. Solomon & N. B. Levy (Eds.), *Men in transition: Changing male roles, theory, and therapy* (pp. 5-44). New York: Plenum Press. Doi:10.1007/978-1-4684-4211-2_2
- O'Neil, J. M., Helms, B. J., Gable, R. K., David, L., & Wrightsman, L. S. (1986). Gender-Role Conflict Scale: College men's fear of femininity. *Sex Roles*, *14*, 335-350. doi:10.1007/BF00287583
- O'Neil, J. M. (1990). Assessing men's gender role conflict. In D. Moore, F. Leafgren, D. Moore, F. Leafgren (Eds.), *Problem solving strategies and interventions for men in conflict* (pp. 23-38). Alexandria, VA, England: American Association for Counseling.
- O'Neil, J. M., Good, G. E., & Holmes, S. (1995). Fifteen years of theory and research on men's gender role conflict: New paradigms for empirical research. In R. F. Levant, W. S. Pollack (Eds.), *A new psychology of men* (pp. 164-206). New York, NY US: Basic Books.

- O'Neil, J. M. (2008). Summarizing 25 years of research on men's gender role conflict using the Gender Role Conflict Scale: New research paradigms and clinical implications. *The Counseling Psychologist, 36*, 358-445.
doi:10.1177/0011000008317057
- O'Neil, J. M. (2015). Men's gender role conflict: Psychological costs, consequences, and an agenda for change. Washington, DC, US: American Psychological Association.
doi:10.1037/14501-000
- Ouellet-Morin, I., Fisher, H. L., York-Smith, M., Fincham-Campbell, S., Moffitt, T. E., & Arseneault, L. (2015). Intimate partner violence and new-onset depression: A longitudinal study of women's childhood and adult histories of abuse. *Depression and Anxiety, 32*, 316-324. doi:10.1002/da.22347
- Parent, M. C., & Moradi, B. (2009) Confirmatory factor analysis of the Conformity to Masculine Norms Inventory and Development of the Conformity to Masculine Norms Inventory-46. *Psychology of Men & Masculinity, 10*, 175-189.
doi:10.1037/a0015481
- Parent, M. C., & Moradi, B. (2011). An abbreviated tool for assessing conformity to masculine norms: Psychometric properties of the Conformity to Masculine Norms Inventory-46. *Psychology of Men & Masculinity, 12*, 339-353. Doi; 10.1037/a0021904
- Parent, M. C. (2013). Clinical considerations in etiology, assessment, and treatment of men's muscularity-focused body image disturbance. *Psychology of Men & Masculinity, 14*, 88-100. doi:10.1037/a0025644
- Pederson, E. L., & Vogel, D. L. (2007). Male gender role conflict and willingness to seek

- counseling: Testing a mediation model on college-age men. *Journal of Counseling Psychology*, 54, 373-384. doi:10.1037/0022-0167.54.4.373
- Pleck, J. H. (1981). *The myth of masculinity*. Cambridge, MA: MIT Press.
- Pleck, J. H., Sonenstein, F. L., & Ku, L. C. (1994). Attitudes toward male roles among adolescent males: A discriminant validity analysis. *Sex Roles*, 30, 481-501. doi:10.1007/BF01420798
- Pleck, J. H. (1995). The gender role strain paradigm: An update. In R. Levant & W. Pollack (Eds.), *A new psychology of men* (pp. 11-32). New York: Basic Books.
- Pollack, W. S. (2005). 'Masked Men': New psychoanalytically oriented treatment models for adult and young adult men. In G. E. Good, G. R. Brooks (Eds.), *The new handbook of psychotherapy and counseling with men: A comprehensive guide to settings, problems, and treatment approaches (Rev. & abridged ed.)* (pp. 203-216). San Francisco, CA US: Jossey-Bass.
- Pope, H. G., & Katz, D. L. (1990). Homicide and near-homicide by anabolic steroid users. *Journal of Clinical Psychiatry*, 51, 28-31.
- Pope, H. G., & Katz, D. L. (1994). Psychiatric and medical effects of anabolic-androgenic steroid use: A controlled study of 160 athletes. *Archives of General Psychiatry*, 51, 375-382. doi:10.1001/archpsyc.1994.03950050035004
- Pope, H. G., Olivardia, R., Gruber, A., & Borowiecki, J. (1999). Evolving ideals of male body image as seen through action figures. *International Journal of Eating Disorders*, 26, 65-72. doi:10.1002/(SICI)1098-108X(199907)26:1<65::AID-EAT8>3.0.CO;2-D

- Pope, H. G., Phillips, K. A., & Olivardia, R. (2000). *The Adonis complex: The secret crisis of male body obsession*. New York, NY: The Free Press.
- Pope, C. G., Pope, H. G., Menard, W., Fay, C., Olivardia, R., & Phillips, K. A. (2005). Clinical features of muscle dysmorphia among males with body dysmorphic disorder. *Body Image*, 2, 395-400. doi:10.1016/j.bodyim.2005.09.001
- Reilly, E. D., Rochlen, A. B., & Awad, G. H. (2014). Men's self-compassion and self-esteem: The moderating roles of shame and masculine norm adherence. *Psychology of Men & Masculinity*, 15, 22-28. doi:10.1037/a0031028
- Robertson, J. M. (2005). Counseling Men in College Settings. In G. E. Good, G. R. Brooks, G. E. Good, G. R. Brooks (Eds.), *The new handbook of psychotherapy and counseling with men: A comprehensive guide to settings, problems, and treatment approaches, Rev. & abridged ed* (pp. 70-87). San Francisco, CA, US: Jossey-Bass.
- Robin, L., & Reiger, D. (1991). *Psychiatric Disorders in America*. New York, NY: Free Press.
- Rochlen, A. B., & Mahalik, J. R. (2004). Women's Perceptions of Male Partners' Gender Role Conflict as Predictors of Psychological Well-Being and Relationship Satisfaction. *Psychology of Men & Masculinity*, 5, 147-157. doi:10.1037/1524-9220.5.2.147
- Ricciardelli, R., Clow, K., & White, P. (2010). Investigating hegemonic masculinity: Portrayals of masculinity in men's lifestyle magazines. *Sex Roles*, 63, 64-78. doi:10.1007/s11199-010-9764-8

- Ridgeway, R. T., & Tylka, T. L. (2005). College men's perceptions of ideal body composition and shape. *Psychology of Men & Masculinity, 6*, 209-220. doi:10.1037/1529220.6.3.209
- Robertson, J. M. (2005). Counseling Men in College Settings. In G. E. Good, G. R. Brooks (Eds.), *The new handbook of psychotherapy and counseling with men: A comprehensive guide to settings, problems, and treatment approaches (Rev. & abridged ed.)* (pp. 70-87). San Francisco, CA US: Jossey-Bass.
- Rogers, C. (1961). *A therapist's view of psychotherapy: on becoming a person*. London, England: Constable.
- Rogers, J. R., Abbey-Hines, J., & Rando, R. A. (1997). Confirmatory factor analysis of the gender role conflict scale: A cross-validation of Good et al., 1995. *Measurement and Evaluation in Counseling and Development, 30*, 137.
- Rohlinger, D. A. (2002). Eroticizing men: Cultural influences on advertising and male objectification. *Sex Roles, 46*, 61-74. doi:10.1023/A:1016575909173
- Schiller, J. S., Lucas, J. W., & Peregoy, J. A. (2012). Summary health statistics for U.S. adults: National Health Interview Survey, 2011. *Vital and Health Statistics, 10*. Retrieved from http://www.cdc.gov/nchs/data/series/sr_10/sr10_256.pdf
- Schoenefeld, S. J., & Webb, J. B. (2013). Self-compassion and intuitive eating in college women: Examining the contributions of distress tolerance and body image acceptance and action. *Eating Behaviors, 14*, 493-496. doi:10.1016/j.eatbeh.2013.09.001
- Schwartz, J. P., & Tylka, T. L. (2008). Exploring entitlement as a moderator and

- mediator of the relationship between masculine gender role conflict and men's body esteem. *Psychology of Men & Masculinity*, 9, 67-81. doi:10.1037/1524-9220.9.2.67
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Senn, C. Y., Desmarais, S., Verberg, N., & Wood, E. (2000). Predicating coercive sexual behavior across the lifespan in a random sample of Canadian men. *Journal of Social and Personal Relationships*, 17, 95-113. Doi:10.1177/0265407500171005
- Sharp, C. W., Clark, S. A., Dunan, J. R., Blackwood, D. H., & Shapiro, C. M. (1994). Clinical presentation of anorexia nervosa in males: 24 new cases. *International Journal of Eating Disorders*, 15, 125-134.
- Shepherd, C. B., & Rickard, K. M. (2012). Drive for muscularity and help-seeking: The mediational role of gender role conflict, self-stigma, and attitudes. *Psychology of Men & Masculinity*, 13, 379-392. doi:10.1037/a0025923
- Sirois, F. M., Kitner, R., & Hirsch, J. K. (2015). Self-compassion, affect, and health-promoting behaviors. *Health Psychology*, 34, 661-669. doi:10.1037/hea0000158
- Sirois, F. M., Molnar, D. S., & Hirsch, J. K. (2015). Self-compassion, stress, and coping in the context of chronic illness. *Self and Identity*, 14, 334-347. doi:10.1080/15298868.2014.996249
- Smiler, A. P. (2004). Thirty years after the discovery of gender: Psychological concepts and measures of masculinity. *Sex Roles*, 50, 15-26. doi:10.1023/B:SERS.0000011069.02279.4c
- Smith, N. G., & Ingram, K. M. (2004). Workplace Heterosexism and Adjustment Among Lesbian, Gay, and Bisexual Individuals: The Role of Unsupportive Social

- Interactions. *Journal of Counseling Psychology*, 51, 57-67. doi:10.1037/0022-0167.51.1.57
- Smolak, L., Murnen, S. K., & Thompson, J. K. (2005). Sociocultural Influences and Muscle Building in Adolescent Boys. *Psychology of Men & Masculinity*, 6, 227-239. doi:10.1037/1524-9220.6.4.227
- Snyder, C. R., Lopez, S. J., & Pedrotti, J. T. (2011). *Positive psychology: The scientific and practical explorations of human strengths (2nd ed.)*. Thousand Oaks, CA, US: Sage Publications, Inc.
- Spitzer, B. L., Henderson, K. A., & Zivian, M. T. (1999). Gender differences in population versus media body sizes: A comparison over four decades. *Sex Roles*, 40, 545-56. doi:10.1023/A:1018836029738.
- Stewart, T. M. (2004). Light on Body Image Treatment: Acceptance Through Mindfulness. *Behavior Modification*, 28, 783-811. doi:10.1177/0145445503259862
- Stice, E., Cameron, R. P., Killen, J. D., Hayward, C., & Taylor, C. B. (1999). Naturalistic weight-reduction efforts prospectively predict growth in relative weight and onset of obesity among female adolescents. *Journal of Consulting and Clinical Psychology*, 67, 967-974. doi:10.1037/0022-006X.67.6.967
- Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin*, 128, 825-848. doi: 10.1037/0033-2909.128.5.825
- Stoltz, J. (2005). Masculinity and School Violence: Addressing the Role of Male Gender Socialization. *Canadian Journal of Counselling*, 39, 52-63.

- Szymanski, D. M., & Henning, S. L. (2007). The role of self-objectification in women's depression: A test of objectification theory. *Sex Roles, 56*, 45-53.
doi:10.1007/s11199-006-9147-3
- Terry, M. L., & Leary, M. R. (2011). Self-compassion, self-regulation, and health. *Self and Identity, 10*, 352-362. Doi:10.1080/15298868.2011.558404
- Tesh, M., Learman, J., & Pulliam, R. M. (2015). Mindful self-compassion strategies for survivors of intimate partner abuse. *Mindfulness, 6*, 192-201. doi:10.1007/s12671-013-0244-4
- Thomas, T. R. (2009). Examining the relationship between gender role conflict and interpersonal guilt in men. *Dissertation Abstracts International, 70*, 702.
- Thompson, E. J., & Pleck, J. H. (1995). Masculinity ideologies: A review of research instrumentation on men and masculinities. In R. F. Levant, W. S. Pollack, R. F. Levant, W. S. Pollack (Eds.), *A new psychology of men* (pp. 129-163). New York, NY, US: Basic Books.
- Thompson, J. K., Heinberg, L., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance*. Washington, DC: American Psychological Association.
- Thompson, J. K., & Cafri, G. (Eds.). (2007). *The muscular ideal: Psychological, social, and medical perspectives*. Washington, DC: American Psychological Association.
- Thompson, E. J., & Bennett, K. M. (2015). Measurement of Masculinity Ideologies: A (critical) review. *Psychology of Men & Masculinity, 16*, 115-133. Doi: 10.1037/a0038609

- Tod, D., & Edwards, C. (2015). A meta-analysis of the drive for muscularity's relationships with exercise behavior, disordered eating, supplement consumption, and exercise dependence. *International Review of Sport and Exercise Psychology, 8*, 185-203, Doi:10.1080/1750984X.2015.1052089
- Tylka, T. L., Bergeron, D., & Schwartz, J. P. (2005). Development and psychometric evaluation of the Male Body Attitudes Scale (MBAS). *Body Image, 2*, 161-175. doi:10.1016/j.bodyim.2005.03.001
- Tylka, T. L., Russell, H. L., & Neal, A. A. (2015). Self-compassion as a moderator of thinness-related pressures' associations with thin-ideal internalization and disordered eating. *Eating Behaviors, 17*, 23-26. doi:10.1016/j.eatbeh.2014.12.009
- Tylka, T. L. (2015). No harm in looking, right? Men's pornography consumption, body image, and well-being. *Psychology of Men & Masculinity, 16*, 97-107. doi:10.1037/a0035774
- U.S. Census Bureau. (2005). *School enrollment-social and economic characteristics of students: October 2003*. Washington, DC: Author. Retrieved from <http://www.census.gov/prod/2005pubs/p20-554.pdf>
- Uy, P. J., Massoth, N. A., & Gottdiener, W. H. (2014). Rethinking male drinking: Traditional masculine ideologies, gender-role conflict, and drinking motives. *Psychology of Men & Masculinity, 15*, 121-128. doi:10.1037/a0032239
- Visser, S. N., Danielson, M. L., Bitsko, R. H., Holbrook, J. R., Kogan, M. D., Ghandour, R. M., Perou, R., & Blumberg, S. J. (2014). Trends in the parent-report of health care provider-diagnosed and medicated attention-deficit/hyperactivity disorder: United

- states, 2003–2011. *Journal of the American Academy of Child & Adolescent Psychiatry*, 53, 34-46. doi:10.1016/j.jaac.2013.09.001
- Vogel, D. L., Heimerdinger-Edwards, S. R., Hammer, J. H., & Hubbard, A. (2011). “Boys don't cry”: Examination of the links between endorsement of masculine norms, self-stigma, and help-seeking attitudes for men from diverse backgrounds. *Journal of Counseling Psychology*, 58, 368-382. doi:10.1037/a0023688
- Vogel, D. L., Wester, S. R., Hammer, J. H., & Downing-Matibag. (2014). Referring men to seek help: The influence of gender role conflict and stigma. *Psychology of Men and Masculinity*, 15, 60-67. Doi:10.1037/a0031761
- Wade, T. D., Keski- Rahkonen, A., & Hudson, J. I. (2011). Epidemiology of eating disorders. *Textbook of Psychiatric Epidemiology, Third Edition*, 343-360.
- Walker, D. C., Anderson, D. A., & Hildebrandt, T. (2009). Body checking behaviors in men. *Body Image*, 6, 164-170. doi:10.1016/j.bodyim.2009.05.001
- Ward, R. M., & Hay, M. C. (2015). Depression, coping, hassles, and body dissatisfaction: Factors associated with disordered eating. *Eating Behaviors*, 17, 14-18. doi:10.1016/j.eatbeh.2014.12.002
- Wei, M., Liao, K. Y., Ku, T., & Shaffer, P. A. (2011). Attachment, self- compassion, empathy, and subjective well- being among college students and community adults. *Journal of Personality*, 79, 191-221. doi:10.1111/j.1467-6494.2010.00677.x
- Weider, J., & Reynolds, B (1983). *The Weider system of bodybuilding*. Chicago: Contemporary Books.
- Weltzin, T. E., Cornella-Carlson, T., Fitzpatrick, M. E., Kennington, B., Bean, P., & Jefferies, C. (2014). Treatment issues and outcomes for males with eating disorders.

- In L. Cohn, R. Lemberg, L. Cohn, R. Lemberg (Eds.), *Current findings on males with eating disorders* (pp. 151-167). New York, NY, US: Routledge/Taylor & Francis Group.
- Wester, S. R., Christianson, H. F., Vogel, D. L., & Wei, M. (2007). Gender role conflict and psychological distress: The role of social support. *Psychology of Men & Masculinity, 8*, 215-224. doi:10.1037/1524-9220.8.4.215
- Wester, S. R., Vogel, D. L., O'Neil, J. M., & Danforth, L. (2012). Development and evaluation of the Gender Role Conflict Scale Short Form (GRCS-SF). *Psychology of Men & Masculinity, 13*, 199-210. Doi:10.1037/a0025550
- Wolke, D., & Sapouna, M. (2008). Big men feeling small: Childhood bullying experience, muscle dysmorphia and other mental health problems in bodybuilders. *Psychology of Sport And Exercise, 9*, 595-604. doi:10.1016/j.psychsport.2007.10.002
- Wong, Y. J., Pituch, K. A., & Rochlen, A. B. (2006). Men's restrictive emotionality: An investigation of associations with other emotion-related constructs, anxiety, and underlying dimensions. *Psychology of Men & Masculinity, 7*, 113-126. doi:10.1037/1524-9220.7.2.113
- Woodford, M. R., Kulick, A., Sinco, B. R., & Hong, J. S. (2014). Contemporary heterosexism on campus and psychological distress among LGBTQ students: The mediating role of self-acceptance. *American Journal of Orthopsychiatry, 84*, 519-529. doi:10.1037/ort0000015
- Yarnell, L. M., Stafford, R. E., Neff, K. D., Reilly, E. D., Knox, M. C., & Mullarkey, M. (2015). Meta-analysis of gender differences in self-compassion. *Self and Identity, 14*, 499-520. doi:10.1080/15298868.2015.10299

Appendix A
Recruitment Flyer

VOLUNTEERS NEEDED

Researchers from the Department of Educational Psychology at the University of Nebraska Lincoln are conducting a study to understand men's body image and masculinity.

You are eligible to participate if you:

- ⌘ are a heterosexual man
- ⌘ were born and raised in the United States
- ⌘ speak fluent English
- ⌘ have Internet access

Participation in this study takes approximately 30-40 minutes to complete and involves completing a few short online demographic questionnaires. **For your participation, you will be entered into a drawing for one of four \$50.00 gift cards to Amazon.**

To learn more about the study and participate, scan this QR code on your smartphone or go to the URL listed at the bottom.



<http://bit.ly/1TokBYt>

Questions or concerns, please contact Michael S. Butchko, M.A. at
Michael.butchko@huskers.unl.edu

Appendix B
Solicitation Letters to Faculty

LETTER FOR IN-CLASS INSTRUCTION:

Dear Professor _____,

My name is Michael Butchko and I am Ph.D. candidate in the Department of Educational Psychology. I am in the process of collecting data for my dissertation research project and am respectively contacting you to request your help. Particularly, I am interested in understanding body image and masculinity among college-aged men. Although I have access to the University psychology participant pool, this part of the student body is primarily female. Therefore, I am reaching out to campus entities that have a large proportion of male students to ask for help in soliciting their participation. Participation is entirely voluntary and anonymous; our data will not be used to make inferences about specific groups or majors on campus.

The UNL IRB for human subjects research has approved this study and has given me permission to recruit from classrooms across campus. Would it be possible to take 5 minutes of your class time to tell your students about the study? I would describe the study and incentives for participating. Also, would you be willing to give a few points of course extra credit for participation? This is often the best incentive for student participation.

I am hoping to visit the following classes that you teach, as well as any others that you would suggest:

- CLASS, DAY/TIME, LOCATION

Your collaboration would be greatly appreciated!

Best,
Michael S. Butchko, M.A.
Ph.D. Candidate-Counseling Psychology
Department of Educational Psychology
University of Nebraska-Lincoln

LETTER FOR ONLINE INSTRUCTION:

Dear Professor _____,

My name is Michael Butchko and I am Ph.D. candidate in the Department of Educational Psychology. I am in the process of collecting data for my dissertation research project and am respectively contacting you to request your help. Particularly, I am interested in understanding body image and masculinity among college-aged men. Although I have

access to the University psychology participant pool, this part of the student body is primarily female. Therefore, I am reaching out to campus entities that have a large proportion of male students to ask for help in soliciting their participation. Participation is entirely voluntary and anonymous; our data will not be used to make inferences about specific groups or majors on campus.

The UNL IRB for human subjects research has approved this study and has given me permission to recruit from classrooms across campus. Would you be willing to forward my request for participation to the students in your online courses? Also, would you be willing to give a few points of course extra credit for participation? This is often the best incentive for student participation.

We have the following class listed under your instruction:

- CLASS

Your collaboration would be greatly appreciated!

Best,
Michael S. Butchko, M.A.
Ph.D. Candidate-Counseling Psychology
Department of Educational Psychology
University of Nebraska-Lincoln

Appendix C
Classroom Recruitment Announcement

Class Members,

My name is Michael Butchko and I am graduate student in the Department of Educational Psychology at UNL. I am currently in the process of gathering data for my dissertation and am looking for interested participants. My research project is examining masculinity and body image among college-aged men. Particularly, you are able to participate if you identify as a domestic heterosexual male, between the ages of 19-26, and do not participate in a collegiate sport.

The survey packet is online and takes approximately 40 minutes to complete. All responses are anonymous and confidential. This study is COMPLETELY VOLUNTARY and you can choose to skip any question.

PASS OUT RECRUITMENT SLIP.

If the instructor is offering extra credit:

For your participation, you will be given **extra credit** by your course instructor. This link to assign extra credit is NOT connected to your survey responses. Other opportunities to earn extra credit in the course are available as outlined by your instructor. If you are interested in participating in this study, please go to this link:

<http://bit.ly/1TokBYt>

If the instructor is NOT offering extra credit:

For your participation, you will be entered into a raffle to win one of four \$50.00 Gift Cards to Amazon. Your odds of winning one of the gift cards is 1 out of 50. If you are interested in participating in this study, please go to this link:

<http://bit.ly/1TokBYt>

Finally, if you are a member of a fraternity and 75% of your fellow fraternity members participate, I will be willing to write a letter on your behalf to your national chapter stating that your local chapter have served as leaders on campus by contributing to research about men's health and wellness.

Thank you!!

Appendix D Social Media Scripts

Facebook and LinkedIn

My name is Michael Butchko and I am a Ph.D. candidate in the Department of Educational Psychology at the University of Nebraska Lincoln. I am inviting you to participate in a brief survey for my dissertation! The purpose of this dissertation study is to understand body image and masculinity among college-aged men.

You are eligible to participate in this study if you: (a) identify as a male; (b) are aged 19-26 years old; (c) identify as heterosexual; (d) have lived a majority of your life in the United States; and (e) are not a collegiate athlete. It is assumed that you are able to write and speak English.

Participation includes answering self-report items & providing brief demographic information. Maximum time for completion is 30-40 minutes. Participants have the option of entering a drawing for one of four \$50 Amazon.com gift cards.

Please click on the link below to learn more and participate:

<http://bit.ly/1TokBYt>

Twitter (only 160 characters allowed per post)

Heterosexual Men aged 19-26. Complete this survey for a chance to win a \$50.00 gift card to Amazon. <http://bit.ly/1TokBYt>

Appendix E
Consent Form



IRB#20151215831 EX
INFORMED CONSENT FORM

Identification of Project:

Understanding Masculinity and Body Image

Hello! You are invited to participate in a research study that will examine your perceptions and evaluations of your body as well as your masculinity. The following information is provided to help you make an informed decision about whether or not you want to participate in this study.

Purpose of the Study:

The purpose of this study is to understand how gender socialization impacts the relationship men have with their bodies. Participants will be asked to complete survey items, and then answer a brief set of questions about demographic characteristics.

Basis for Participant Selection:

You are eligible to participate in this study if you: (a) identify as a male; (b) identify as heterosexual; (c) have lived a majority of your life in the United States; and (d) have Internet access. It is assumed that you are able to write and speak English.

Explanation of Procedures:

After indicating consent, participants will first answer survey items pertaining to gender socialization and body image. Then, participants will answer brief questions regarding their demographic characteristics. It is expected that completion of survey items will take 30-40 minutes. Following the completion of these items, participants will either receive extra credit for their respective course or have the option of entering into a prize drawing.

Potential Risks and Discomforts to Participant:

Potential risks and discomforts are considered minimal for participation in this survey study. Individuals may experience some emotional discomfort when answering survey questions.

Potential Benefits to Participant

There are no direct benefits for participating in this study. Participants may benefit from

study participation through gaining awareness about your gender socialization and your attitudes/perceptions about your body.

Compensation

Compensation includes one of two ways. Either you will earn extra credit for your respective course or if you are not completing this for extra credit, you will be able to enter a drawing for one of four \$50.00 Amazon.com gift cards. Overall odds of receiving a gift card are dependent on how many participants complete the study. This survey will include a minimum of 200 participants; at best the odds of receiving a gift card are 1 in 50.

Confidentiality:

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a participant and only researchers will have access to the records.

Voluntary Participation and Withdrawal:

You may decide not to participate in this study or to withdraw at any time without negatively affecting your relationship with the researchers or the University of Nebraska-Lincoln.

Rights of Research Participants

Your rights as a research participant have been explained to you. If you have any additional questions about this study, please contact the Principal Investigator, Michael S. Butchko, M.A., (651)-249-1384 or the Secondary Investigator, M. Meghan Davidson, Ph.D., (402) 472-1482 at the Department of Educational Psychology, 114 Teachers College Hall, Lincoln, NE 68588-0345.

If you have any questions concerning your rights as a research participant that have not been answered by the Principal Investigator, or to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965. **Consent, Right to Receive a Copy.** You are voluntarily making a decision whether or not to participate in this research study. Clicking below certifies that you have decided to participate and having read and understood the information presented. If you would like a hard copy of the consent form please contact Michael S. Butchko (michael.butchko@huskers.unl.edu).

Do you wish to continue with this survey?

Yes

No

Appendix F
Self-Compassion Scale

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

**Almost
Always**
1

2

3

4

**Almost
Never**
5

- _____ 1. I'm disapproving and judgmental about my own flaws and inadequacies.
- _____ 2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.
- _____ 3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.
- _____ 4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.
- _____ 5. I try to be loving towards myself when I'm feeling emotional pain.
- _____ 6. When I fail at something important to me I become consumed by feelings of inadequacy.
- _____ 7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.
- _____ 8. When times are really difficult, I tend to be tough on myself.
- _____ 9. When something upsets me I try to keep my emotions in balance.
- _____ 10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.
- _____ 11. I'm intolerant and impatient towards those aspects of my personality I don't like.
- _____ 12. When I'm going through a very hard time, I give myself the caring and tenderness I need.
- _____ 13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.

- _____ 14. When something painful happens I try to take a balanced view of the situation.
- _____ 15. I try to see my failings as part of the human condition.
- _____ 16. When I see aspects of myself that I don't like, I get down on myself.
- _____ 17. When I fail at something important to me I try to keep things in perspective.
- _____ 18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.
- _____ 19. I'm kind to myself when I'm experiencing suffering.
- _____ 20. When something upsets me I get carried away with my feelings.
- _____ 21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.
- _____ 22. When I'm feeling down I try to approach my feelings with curiosity and openness.
- _____ 23. I'm tolerant of my own flaws and inadequacies.
- _____ 24. When something painful happens I tend to blow the incident out of proportion.
- _____ 25. When I fail at something that's important to me, I tend to feel alone in my failure.
- _____ 26. I try to be understanding and patient towards those aspects of my personality I don't like.

Appendix G
Male Body Attitudes Scale (MBAS)

- | Never
1 | Rarely
2 | Sometimes
3 | Often
4 | Usually
5 | Always
6 |
|------------|-------------|----------------|------------|--------------|-------------|
|------------|-------------|----------------|------------|--------------|-------------|
-
- _____ 1. I think I have too little muscle on my body.
- _____ 2. I think my body should be leaner.
- _____ 3. I wish my arms were stronger.
- _____ 4. I feel satisfied with the definition in my abs (i.e., stomach muscles).
- _____ 5. I think my legs are *not* muscular enough.
- _____ 6. I think my chest should be broader.
- _____ 7. I think my shoulders are too narrow.
- _____ 8. I am concerned that my stomach is too flabby.
- _____ 9. I think my arms should be larger (i.e., more muscular).
- _____ 10. I feel dissatisfied with my overall body build.
- _____ 11. I think my calves should be larger (i.e., more muscular).
- _____ 12. I wish I were taller.
- _____ 13. I think I have too much fat on my body.
- _____ 14. I think my abs are *not* thin enough.
- _____ 15. I think my back should be larger and more defined.
- _____ 16. I think my chest should be larger and more defined.
- _____ 17. I feel satisfied with the definitions in my arms.
- _____ 18. I feel satisfied with the size and shape of my body.
- _____ 19. I am satisfied with my height.
- _____ 20. Has eating sweets, cakes, or other high calorie food made you feel fat or weak?
- _____ 21. Have you felt excessively large or rounded (i.e., fat)?
- _____ 22. Have you felt ashamed of your body size or shape?
- _____ 23. Has seeing your reflection (e.g., in a mirror or window) made you feel badly about your size or shape?
- _____ 24. Have you been so worried about your body size or shape that

you have been feeling that you ought to diet?

Appendix H
Drive for Muscularity Scale

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

Never	Rarely	Sometimes	Often	Usually	Always
1	2	3	4	5	6

- _____ 1. I wish I were more muscular.
- _____ 2. I lift weights to build up muscle.
- _____ 3. I use protein or energy supplements.
- _____ 4. I drink weight gain or protein shakes.
- _____ 5. I try to consume as many calories as I can in a day.
- _____ 6. I feel guilty if I miss a weight training session.
- _____ 7. I think I would feel more confident if I had more muscle mass.
- _____ 8. Other people think I work out with weights too often.
- _____ 9. I think that I would look better if I gained 10 pounds in bulk.
- _____ 10. I think about taking anabolic steroids.
- _____ 11. I think that I would feel stronger if I gained a little more muscle mass.
- _____ 12. I think that my weight training schedule interferes with other aspects of my life.
- _____ 13. I think that my arms are not muscular enough.
- _____ 14. I think that my chest is not muscular enough.
- _____ 15. I think that my legs are not muscular enough.

Appendix I
Muscle Appearance Satisfaction Survey (MASS)

Definitely Disagree	Disagree	Neither Agree or Disagree	Agree	Definitely Agree
1	2	3	4	5

- _____ 1. When I look at my muscles in the mirror. I often feel satisfied with my current muscle size.
- _____ 2. If my schedule forces me to miss a day of working out with weights, I feel very upset.
- _____ 3. I often ask friends and/or relatives if I look big.
- _____ 4. I am satisfied with the size of my muscles.
- _____ 5. I often spend money on muscle-building supplements.
- _____ 6. It is OK to use steroids to add muscle mass.
- _____ 7. I often feel like I am addicted to working out with weights.
- _____ 8. If I have a bad workout, it is likely to have a negative effect on the rest of my day.
- _____ 9. I would try anything to get my muscles to grow.
- _____ 10. I often keep working out even when my muscles or joints are sore from previous workouts.
- _____ 11. I often spend a lot of time looking at my muscles in the mirror.
- _____ 12. I spend more time in the gym working out than most others who work out.
- _____ 13. To get big, one must be able to ignore a lot of pain.
- _____ 14. I am satisfied with my muscle tone/definition.
- _____ 15. My self-worth is very focused on how my muscles look.
- _____ 16. I often ignore a lot of physical pain while I am lifting to get bigger.
- _____ 17. I must get bigger muscles by any means necessary.

_____ 18. I often seek reassurance from others that my muscles are big
enough.

_____ 19. I often find it difficult to resist checking the size of my muscles.

Appendix J
Demographic Questionnaire

1) Age

- 18 and younger
- 19
- 20
- 21
- 22
- 23
- 24
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- 52
- 53
- 54
- 55
- 56
- 57

- 58
- 59
- 60
- 61 and older

2) Gender

- Male
- Female
- Transgender

3) Racial or ethnic background

- Black/African American
- Asian American or Pacific Islander
- Caucasian (White)
- Hispanic, Chicano, Latino, or Latina
- Native American or American Indian
- A mixture of more than one ethnic identification (bi-racial or multi-racial)
- Other

4) What is your religious preference, if any?

- Catholic
- Protestant
- Islamic
- Jewish
- Hindu
- Agnostic
- Atheist
- Questioning
- Other

5) Please indicate your sexual orientation

- Heterosexual
- Bisexual
- Gay
- Queer
- Questioning
- Asexual
- Other

6) Current Romantic Relationship

- Never dated or been in a romantic relationship
- Single
- Dating casually
- In a romantic relationship but not living with partner

- In a romantic relationship and living with partner
- Married
- Separated
- Divorced
- Widowed

7) What is your work-status?

- Full time employee
- Part time employee
- Unemployed
- Student

8) If you are a student, what program are you currently attending?

- Two year associates program
- Community college
- Four year university
- Vocational Program

9) If you attend a four-year university, what year are you?

- Freshman
- Sophomore
- Junior
- Senior
- Graduate Student

10) Highest level of education?

- Some high school
- High school graduate
- Some college
- College graduate
- Some graduate school
- Master's Degree
- Advanced degree (e.g., Ph.D., M.D. etc.)

11) If you are/were a college student, are/were you an athlete at the collegiate level?

- Yes
- No

12) If yes, which sport do/did you participate in?

- Football
- Baseball
- Basketball
- Soccer
- Golf

- Tennis
- Track and Field
- Wrestling
- Cross Country
- Gymnastics
- Other

13) If you are/were a college student, are you/were a member of a fraternity?

- Yes
- No

14) How many days per week do you spend weight lifting?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7

15) How many hours per day do you spend weight lifting?

- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5 or more hours

16) If you weight lift, do you take performance supplements (e.g., protein, creatine, pre/post work out drinks?)

- Yes
- No

17) Do you take anabolic steroids?

- Yes
- No