Drive for Muscularity and Conformity to Masculine Norms Among College Football Players

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With sociocultural norms in American culture suggesting that muscularity is associated with masculinity, men often strive for a muscular physique. Because the psychological research on this drive for muscularity has focused primarily on negative outcomes, our mixed-method study intended to assess the contextual nature of this dynamic by examining muscularity within a functional context (e.g., sport). We assessed the experiences of 197 college football players who operate in this “masculinized” context (e.g., Richman & Shaffer, 2000) where muscularity is viewed functionally (i.e., maximizing athletic performance, minimizing injuries). Quantitative results indicated that athletic identity and certain traditional masculine norms (i.e., risk taking, emotional control, primacy of work) were significantly related to the drive for muscularity among college football players. Qualitative results indicated that football players primarily cited reasons for their desire to be muscular that were related to athletic functioning, while also acknowledging social benefits of external gratification (e.g., physical appearance, conformity, sex appeal) that are more prominent in the drive for muscularity literature. Results of this contextual examination were interpreted within existing theoretical frameworks of social comparison theory, masculinity socialization, and drive for muscularity.

Keywords: Conformity to Masculine Norms Inventory-46, student-athletes, NCAA intercollegiate sports, masculinity socialization, male body image, mixed-methods study

Muscularity, which is often equated with masculinity (e.g., Helgeson, 1994), is highly emphasized within American society. The pairing of these distinct yet related constructs can contribute to psychological distress as men socially compare themselves to other men, attempting to conform their bodies to meet sociocultural expectations of what it means to be a man (Festinger, 1954; McCauley, Saucier, & Courtenay, 2005; Mussap, 2008; Smolak & Murnen, 2008). Recent research has examined the psychological dimensions of men’s drive for muscularity, but much of this empirical research has focused on nonathletic populations (Gilchrist, 2008; McCauley, Saucier, & Courtenay, 2005; Pope, Phillips, & Olivardia, 2000). Furthermore, studies involving athletes have focused primarily on negative outcomes associated with the drive for muscularity (e.g., Davis, Karvinen, & McCauley, 2005; Harrison & Bond, 2007; Labre, 2002; Morrison, Morrison, & Hopkins, 2003; Olivardia, Pope, Borowiecki & Cohane, 2004; Ridgeway & Tylka, 2005;
Smolak & Stein, 2006). However, an exclusive focus on the negative aspects of muscularity may not fully reflect dynamics of the drive for muscularity that operate within the unique context of sport (Steinfeldt, Carter, Benton, & Steinfeldt, 2011a).

Subsequently, the purpose of our mixed-method study was to contextually examine muscularity and masculinity by investigating the experiences of a group of men (i.e., college football players) for whom masculinity serves a functional purpose (e.g., to perform better in sport, to avoid injuries). Using quantitative methods, our first goal was to determine if conformity to masculine norms and athletic identity contributed to higher levels of drive for muscularity among college football players. Our second goal was to use qualitative methods to provide greater depth of understanding about the unique beliefs and experiences of college football players who strive to be muscular. We hoped to contribute to our understanding of the contextual nature of masculinity by highlighting the experiences of a group of men (i.e., football players) whose experiences have not been represented in muscularity research. These men operate within a context that provides unique messages about masculinity, as well as requirements for muscularity that may differ from men who do not participate in the contact sport of football.

Social Comparison Theory and Conformity to Masculine Norms

Contextual influences on muscularity contribute to men’s perceptions about what it means to be a man and what they need to do to their bodies in order to conform to these sociocultural expectations. A framework that explains how men internalize sociocultural messages that impact how they perceive their bodies, social comparison theory (Festinger, 1954) suggests that individuals evaluate themselves based on comparing themselves to others. Furthermore, these social comparisons can be influenced by social norms. Social gender role norms are the unwritten rules that govern masculine and feminine behavior in society (Cialdini & Trost, 1999). Specifically, masculine gender role norms provide strong messages about what it means to be a man (Addis & Mahalik, 2003). As a result, men often come to learn what behavior is associated with being masculine through many contextual expectations—both explicit and implicit—that influence conformity to these normative messages (Mahalik et al., 2003).

As it relates to social comparison theory, masculine norms are often communicated to men when they see how other men act (Kahn, 2009). Conforming to traditional masculine norms has both benefits and costs for men (Mahalik, Talmadge, Locke, & Scott, 2005). For example, conforming to masculine norms can benefit a man by facilitating his acceptance into social groups and by providing both social and financial rewards (Mahalik et al., 2005). However, research has demonstrated that conforming to masculine norms can have a negative impact on men (e.g., increased binge drinking, Liu & Iwamoto, 2007; greater endorsement of rape myths and more sexually aggressive behavior, Locke & Mahalik, 2005; more health risk behaviors and fewer health promotion behaviors, Mahalik, Levi-Minzi, & Walker, 2007). Men are inundated with sociocultural messages that tell them “what it means to be a man,” and investigations into this socialization process need to address the different contexts in which these messages are conveyed (e.g., Addis, Mansfield, & Syzdek, 2010).

Masculinity and Athletic Identity in Football

A young man’s emerging conceptualization of masculinity is often influenced by organized athletic activities within the subculture of sports (Abell & Richards, 1996; Franzoi & Koehler, 1998; Olivardia et al., 2004; Ricciardelli & McCabe, 2004). Many athletes who persist in sport over time tend to develop a strong identification with the athlete aspect of their emerging self-identity (Brewer & Cornelius, 2001; Murphy, Petitpas, & Brewer, 1996). This athletic identity can be conceptualized as the combination of cognitive, affective, behavioral, and social aspects relating to identification with the role of athlete (Brewer, Van Raalte, & Linder, 1993; Murphy et al., 1996). Identification with the athlete role is not inherently problematic, but it can contribute to negative outcomes if an overly salient athletic identity forecloses exploration of other aspects of self-identity (i.e., academic, social; Brewer & Cornelius, 2001). An overly
salient athletic identity has been linked to negative outcomes such as difficulty transitioning out of sport (Grove, Lavallee, & Gordon, 1997), anxiety (Masten, Tusek, & Faganel, 2006), and poor academic performance (Lewis, 1993). Recent research on athletic identity and masculinity socialization in sport has indicated that male football players who strongly identified with the athlete role also reported higher levels of gender role conflict (Steinfeldt, Rutkowski, Vaughan, & Steinfeldt, 2011; Steinfeldt & Steinfeldt, 2010; Steinfeldt, Steinfeldt, England, & Speiglet, 2009) and greater conformity to masculine norms (Steinfeldt & Steinfeldt, in press). Thus, the unique context of football provides men with socialization experiences that can contribute to their development of an emerging sense of self, both as an athlete and as a man. Despite emerging empirical support for this connection and the need for athletes to be muscular in order to be successful in their respective sports (Messner, 1990), there is a dearth of research examining the relationship between athletic identity and muscularity.

Drive for Muscularity in Football

Research on body image and drive for muscularity among male college athletes suggests that their concept of muscularity is multidimensional (i.e., desire for muscular size, shape, definition/tone, strength, utility), and that this desire to be muscular is related to participants’ conceptualization of masculinity (e.g., Raudenbush & Meyer, 2003; Ridgeway & Tylka, 2005). The drive for muscularity is defined by McCreary and Sasse (2000) as “attitudes and behaviors that reflect the degree of a person’s preoccupation with increasing their muscularity” (p. 300). Discrepancies between actual and ideal muscularity often motivate this drive (Leit, Gray, & Pope, 2002; Morgan, 2000; Pope, Olivardia, Gruber, & Borowiecki, 1999). The drive for muscularity has been found to be more prevalent in men who tend to desire a muscular mesomorphic shape (Dixson, Halliwell, & East, 2003; Lindner, Ryckman, Gold, & Stone, 1995; Maier & Lavrakas, 1984). Corresponding to recent attention paid to women’s drive for muscularity (e.g., McCreary & Saucier, 2009; Steinfeldt et al., 2011a), results suggest differences between genders in the process by which men and women view their bodies, particularly as it relates to how they desire to achieve muscularity. For example, in addition to gaining muscle, men often prefer to lose body fat composition not to be thinner, but rather to increase muscle definition (Andersen, 1984; Andersen, Cohn, & Holbrook, 2000).

This ideal of lean muscularity encourages men to lose body fat while increasing muscle size and definition (e.g., Leon, Fulkerson, Perry, Keel, & Klump, 1999). This dynamic has been referred to as the *Adonis Complex*, in reference to *Adonis*, the mythical Greek god who embodied the ideal of masculine beauty and was desired by all women (Pope et al., 2000). As a benefit to muscularity, a muscular body can be viewed as a powerful expression of masculinity that elicits respect, admiration, and even envy from others (Olivardia, 2001). Conveying strength and power with the intent of causing others to feel intimidated and fearful is a beneficial purpose of muscularity for men in certain occupational contexts (e.g., bouncers, body guards, state patrol officers; Gilchrist, 2008; Olivardia, 2001). Conversely, researchers have identified a number of costs to the pursuit of muscularity, including body image issues (e.g., social physique anxiety, McCreary & Saucier, 2009; muscle dysmorphia, Pope, Gruber, Choi, Olivardia, & Phillips, 1997) and a host of other physical and psychological risks (e.g., Cafri et al., 2005). However, while it is important to examine costs associated with muscularity, there is a dearth of research examining the experiences of men for whom muscularity represents not only a socially desirable quality, but also an occupational and contextual necessity.

The sport of football represents such a context that requires a high level of muscularity from its participants. In this contact sport, players use their bodies as weapons to achieve their goals, particularly the goal of physical domination of one’s opponent (Messner, 1990; Wellard, 2002). Men who play contact sports often conceptualize their bodies as functional entities by endorsing a “body-as-process” perspective (i.e., viewing the body as a machine whose instrumentality is more important than aesthetics, Franzoi, 1995). In this context, men tend to view larger muscles as something that is necessary for increased strength, speed, and injury prevention. Thus, within the unique context of football, muscularity can serve the functional
purpose of maximizing performance and minimizing injuries (Matthews & Wagner, 2008).

In examining body image among high school football players, Parks and Read (1997) reported significant differences between football players’ current and ideal weight, indicating that these football players wanted to be heavier than they currently are. Related to this desire to gain weight is the increased use of supplements—particularly anabolic steroids—within sports (e.g., Hruby, 2010). Anabolic steroids have led to the most dramatic changes in the male form in modern American history, with some estimates indicating that over 3 million men (between 3% and 12% of adolescent boys) have used them, mostly in the past 15 years (Buckley et al., 1988; Cloud, 2000). In addition to illegal anabolic steroids, men are buying legal food supplements that are advertised to facilitate the process of getting bigger, leaner, and/or stronger. These products (e.g., protein powders and bars, creatine, ephedrine, adrenal hormones) are popular (between 7.9% and 23% of male athletes reporting creatine use), lightly regulated, and present different severity of side effects (Metzl, Small, Levine, & Gershel, 2001; Pope et al., 2000; Ricciardelli & McCabe, 2002, 2004). Thus, ingesting these supplements can increase muscularity, but there are risks involved in doing so. Subsequently, it is important to examine the experiences of men who participate in contexts that are supportive of these potentially dangerous methods for achieving muscularity.

Current Study

The purpose of this study was to examine muscularity within a functional context by assessing the experiences of members of a unique population (i.e., football players) for whom muscularity serves the purpose of maximizing performance and minimizing injuries. Furthermore, the domain of college football provides a relevant area for contextual analyses of masculinity based on the sport’s prominent status among men in the United States (Foley, 2001; Messner, 2002) and its ability to convey socioculturally desirable masculine ideals (e.g., expressions of strength, winning, violence, physical contact; Messner, 2002; Sabo & Panepinto, 1990). In this mixed-method study, we were interested in exploring the relationship between masculine norms, identification with the athlete role, and drive for muscularity among college football players. Our first hypothesis was that certain traditional masculine norms would predict drive for muscularity. Particularly, we hypothesized that higher conformity to the norms of winning, risk taking, and violence would be significantly related to higher Drive for Muscularity (DMS) scores. Because no research to date has examined the relationship between conformity to masculine norms and the drive for muscularity, we based this hypothesis on the pretense that these norms (i.e., winning, risk-taking, violence) represent prominent values that are embedded within sport and are often associated with traditional masculine traits (e.g., strength, assertiveness, aggression, competition; Wellard, 2002; Whannel, 2007; Whitson, 1990).

Additionally, our second hypothesis was that higher levels of athletic identity would also be significantly related to higher DMS scores. We hypothesized that increased identification with the athlete role (e.g., Brewer et al., 1993) would potentially contribute to behaviors and beliefs (i.e., desire to be muscular) that provide participants with greater visibility and identification as an athlete. Finally, although much literature has focused on sociocultural pressures that men face to be muscular (e.g., physical appearance, sex appeal, get respect; Farquhar & Wasylkiw, 2007; Galli & Reel, 2009; Gilchrist, 2010; Leit et al., 2002), muscularity represents a functional component for athletes, particularly those who play the violent and aggressive contact sport of football (e.g., Messner, 1990, 1992). Thus, our third hypothesis was that football players would report functionality (i.e., reasons related to sport performance) as the primary reason they wanted to be muscular. Nearly all men are subjected to the dynamics of social comparison that idealize a body type that is both low in body fat and high in muscle mass (Dixson et al., 2003; Lindner et al., 1995; Maier & Lavrakas, 1984), but football players operate in a unique context that requires this body type in order to facilitate athletic success and avoid injuries.

Method

Participants

The participants in this study were 197 college football players who attended one of three colleges in the Western region of the United
States. All institutions participated at the National Collegiate Athletic Association (NCAA) Division II level (85, 60, and 52 participants from each institution, respectively). Fifty-four percent of the participants reported having an athletic scholarship, while 46% were not on scholarship. The mean age of the participants was 19.39 (SD = 1.52), and the sample was made up of 44% freshmen, 24% sophomores, 17% juniors, and 15% seniors. The participants self-identified their race as White (74%), Black (10%), Multiracial (3%), Hispanic (5%), American Indian (2%), “Other” (4%), and 2% of respondents did not report a racial self-identification.

Measures

Conformity to masculine norms. The Conformity to Masculine Norms Inventory-46 (CMNI-46; Parent & Moradi, 2009) is a 46-item self-report instrument that uses a four-point Likert-type scale with possible responses ranging from 0 (strongly disagree) to 3 (strongly agree). The CMNI-46 is a psychometrically validated short form of the original 94-item CMNI (Mahalik et al., 2003). The purpose of the CMNI-46 is to assess men’s conformity to various masculine norms that are widely endorsed in dominant American culture. The CMNI-46 has nine subscales: (a) Winning (six items; e.g., “In general, I will do anything to win”); (b) Emotional Control (six items; e.g., “I tend to keep my feelings to myself”); (c) Risk-Taking (five items; e.g., “I enjoy taking risks”); (d) Violence (six items; e.g., “Sometimes violent action is necessary”); (e) Power Over Women (four items; e.g., “In general, I control the women in my life”); (f) Playboy (four items e.g., “If I could, I would frequently change sexual partners”); (g) Self-Reliance (five items; e.g., “It bothers me when I have to ask for help”); (h) Primacy of Work (four items; e.g., “My work is the most important part of my life”); and (i) Heterosexual Self-Presentation (six items; e.g., “I would be furious if someone thought I was gay”). Some items are reverse-coded, and higher scores represent higher levels of conformity to masculine norms. Parent and Moradi (2009) reported concurrent validity evidence based on the CMNI-46 and its subscale factors being positively correlated with the theoretically corresponding scales of the original CMNI. Reliability for the CMNI-46 was demonstrated by the nine subscales producing scale score reliability coefficients ranging from .77 (Primacy of Work) to .91 (Heterosexual Self-Presentation; Parent & Moradi, 2009). The scale score reliability coefficients for the current study were as follows: Winning = .78; Emotional Control = .80; Risk-Taking = .73; Violence = .77; Power Over Women = .76; Playboy = .79; Self-Reliance = .72; Primacy of Work = .68; and Heterosexual Self-Presentation = .83.

Athletic identity. The Athletic Identity Measurement Scale (AIMS; Brewer & Cornelius, 2001) is a seven-item, self-report instrument that uses a seven-point Likert-type scale with possible responses ranging from 1 (strongly disagree) to 7 (strongly agree). In measuring the strength and exclusivity of identification with the athlete role, AIMS items (e.g., “I consider myself an athlete” or “Sport is the most important part of my life”) rate the extent to which respondents agree with statements about cognitive, affective, and behavioral aspects of identification with the athlete role. Higher AIMS scores indicate a stronger and a more exclusive identification with the athlete role. The Cronbach’s alpha coefficient (α = .68) for the AIMS in the current study is consistent with the scale score reliability scores found in other studies (Brewer & Cornelius, 2001; Brewer et al., 1993). Support for construct validity of the AIMS has been demonstrated through examinations of differences in athletic identity across levels of athletic competition, with athletes in higher levels of competition reporting higher athletic identity (Brewer et al., 1993; Cornelius, 1995). Additionally, Visek, Hurst, Maxwell, and Watson (2008) provided cross-cultural validation of the AIMS in their psychometric evaluation with participants from Hong Kong and the U.S.

Drive for muscularity. The DMS (McCreary & Sasse, 2000) is a 15-item self-report instrument that uses a six-point Likert-type scale with possible responses ranging from 1 (always) to 6 (never) to assess attitudes and behaviors related to a muscular appearance. The entire scale is reverse-coded, and higher scores represent a greater desire to be muscular. The DMS produces an overall score by asking participants to respond to items such as, “I think I would be more confident if I had more muscle
mass” and “I feel guilty if I miss a weight training session.” Support for convergent validity for the DMS can be found in its significant correlation with psychological indicators of body image disorders (e.g., higher depression, lower self-esteem; McCreary & Sasse, 2000). In support of the scale’s reliability, Cafri and Thompson (2004) reported 7 to 10 day test-retest correlations of .93. Additionally, in their review of the literature on the DMS, McCreary (2007) reported scale score reliability coefficients on the DMS ranging between .85 and .91 with male participants. Consistent with those findings, the Cronbach’s alpha coefficient in our study for the overall DMS was \( \alpha = .88 \).

**Reasons for being muscular.** The qualitative portion of the survey consisted of three open-ended questions that were taken from an interview protocol developed by Morrison et al. (2003). Participants were asked to write in their responses to these open-ended questions. These questions attempted to elicit participants’ individualized beliefs about muscularity by allowing participants to provide responses about their own unique perceptions about muscularity. Questions from the Morrison et al. (2003) protocol were used: (a) “Why do you think men want to be muscular?” (b) “If applicable, why do you want to be muscular?” and (c) “What are the benefits of being muscular?” Participants could potentially report multiple reasons for being muscular because this open-ended format did not restrict the number of responses that could be given on a particular question.

**Procedures**

Research for this study was conducted in compliance with institutional review board policies and APA ethical principles. The first author contacted athletic administrators and coaches who agreed to make football players available for voluntary participation in the study without compensation. At a team meeting outside of class and practice time, participants received consent forms and those who completed these consent forms were provided a survey packet to fill out. Participants took approximately 10 to 15 minutes to complete the survey packet. In an effort to ensure voluntary participation, participants were informed that if they did not want to participate in the study, they could write in their playbooks and turn in a blank survey packet at the end. Participants were assured of anonymity and were informed that all their data would be kept confidential and in a safe locked location.

**Qualitative Data Analysis**

Our methodology focused primarily on the quantitative methods with a lesser emphasis on the qualitative methodology. Based on our decision to collect quantitative and qualitative data at the same time, our mixed-method approach can be categorized theoretically as a “concurrent QUANT + qual” study (Morse, 1991). We modeled our mixed-method approach on another concurrent QUANT + qual mixed-method study (Steinfeldt, Wong, Hagen, Hoag, & Steinfeldt, 2011b) that also asked participants to complete a survey containing rating scales (i.e., quantitative items) and open-ended questions (i.e., qualitative items). In order to analyze the qualitative responses to the questions, we used a codebook that was created by Steinfeldt et al. (2011a) in their study with athletes that analyzed the questions from Morrison et al.’s (2003) interview protocol. The codebook that we used can be found in Appendix A. This coding scheme contained five possible categories of responses: (a) Internal Gratification (e.g., self-esteem, confidence); (b) External Gratification (e.g., to look good, for sexual appeal, conformity); (c) Health (e.g., to be fit, to become healthy); (d) Functionality (e.g., to be stronger, to perform better at sport); and (e) I Don’t Want to Be Muscular. There was also an Other category for the coders to address responses that did not fit into the categorization scheme.

The third and fourth authors used this coding scheme to independently code the participants’ qualitative responses. Because of the open-ended format of the questions, each response contained content that could be coded within multiple categories. We calculated interrater reliability coefficients for the responses that were blindly coded by each of the independent researchers. The Kappa coefficient of interrater reliability across all three questions was .72. The Kappas for each coded category across all three questions were as follows: Internal Gratification = .61; External Gratification = .71; Health = .82; and Functionality = .75. Because the level of interrater agreement across all three
questions on the I Don’t Want to Be Muscular category was 100%, there was no need for a Kappa computation. We included an Other category, but results did not yield a critical mass of responses that would warrant the creation of a new category. The Kappa coefficients we calculated indicated that the two independent coders reached an acceptable level of agreement on their coding of the data. Differences were reconciled through consensus to produce a final coded data set of qualitative responses.

Results

Quantitative Analyses

The means, standard deviations, and intercorrelations of the main study variables are provided in Table 1. Athletic Identity and many of the CMNI-46 subscales (e.g., Winning, Emotional Control, Risk-Taking, Violence, Self-Reliance, Heterosexual Self-Preservation) were significantly correlated with DMS among football players in this sample. We conducted a hierarchical multiple regression analysis to address the first two hypotheses concerning the relationship between conformity to masculine norms, Athletic Identity, and DMS among college football players. In order to control for demographic variables, we entered the following variables in the first step: Year in School, Institution (i.e., the three separate schools surveyed), Scholarship Status, and Race. In the second step, we entered Athletic Identity, and then we entered the nine subscales of the CMNI-46 in the third step (see Table 2). The overall model accounted for 28% of the variance in DMS, yielding four statistically significant predictive variables: the CMNI-46 subscale Emotional Control (β = .20, p = .013); the CMNI-46 subscale Risk Taking (β = .22, p = .004); the CMNI-46 subscale Primacy of Work (β = .22, p < .001); and Athletic Identity (β = .18, p = .013). Our first hypothesis received mixed support because not all of the predicted CMNI-46 subscales were significantly related to DMS. One norm, Risk Taking, was significantly related to DMS (as predicted), but neither Winning nor Violence were significantly related. Instead, Emotional Control and Primacy of Work were significantly related to DMS. In support of our second hypothesis, Athletic Identity was significantly related to DMS. Thus, our first two hypotheses received mixed support.

Qualitative Analyses

In an effort to assess our third hypothesis concerning reasons that college football players would give for wanting to be muscular, we coded the qualitative responses that participants gave to the three open-ended questions (see Table 3 for a categorical breakdown of number...
and frequency of responses to each of the three questions). Results showed that External Gratification represented the largest category (57.0%) of football players’ responses to the first question (i.e., *Why do you think men want to be muscular?*), followed by Functionality (21.2%), Internal Gratification (10.0%), and Health (7.5%). Only one participant response indicated that men did not want to be muscular.

In regard to the second question (i.e., *If applicable, why do you want to be muscular?*), results showed that Functionality represented the largest category (43.3%) of football players’ responses, followed by External Gratification (30.7%), Health (15.0%), and Internal Gratification (8.7%). Only one participant response indicated that he did not want to be muscular. Finally, results showed that External Gratifica-

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<td></td>
</tr>
</tbody>
</table>

*p < .05.  **p < .01.  ***p < .001.

Table 3

<table>
<thead>
<tr>
<th>Question</th>
<th>Internal Gratification</th>
<th>External Gratification</th>
<th>Health</th>
<th>Function</th>
<th>I do not want to be muscular</th>
<th>Other</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Why do men want to be muscular?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Responses</td>
<td>32</td>
<td>183</td>
<td>24</td>
<td>68</td>
<td>1</td>
<td>13</td>
<td>321</td>
</tr>
<tr>
<td>Frequency</td>
<td>10.0%</td>
<td>57.0%</td>
<td>7.5%</td>
<td>21.2%</td>
<td>0%</td>
<td>4.0%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Why do you want to be muscular?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Responses</td>
<td>26</td>
<td>92</td>
<td>45</td>
<td>130</td>
<td>1</td>
<td>6</td>
<td>300</td>
</tr>
<tr>
<td>Frequency</td>
<td>8.7%</td>
<td>30.7%</td>
<td>15.0%</td>
<td>43.3%</td>
<td>0%</td>
<td>2.1%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>What are the benefits of being muscular?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Responses</td>
<td>43</td>
<td>165</td>
<td>68</td>
<td>149</td>
<td>0</td>
<td>9</td>
<td>434</td>
</tr>
<tr>
<td>Frequency</td>
<td>9.9%</td>
<td>38.0%</td>
<td>15.7%</td>
<td>34.3%</td>
<td>0%</td>
<td>2.1%</td>
<td>100%</td>
</tr>
</tbody>
</table>
tion represented the largest category (38.0%) of football players’ responses to the third question (i.e., What are the benefits of being muscular?), followed by Functionality (34.3%), Health (15.7%), and Internal Gratification (9.9%). There were no participant responses that indicated there was no benefit to being muscular. In sum, these results provided support for our third hypothesis that football players would report functional reasons (e.g., “I’ll be bigger and stronger and that helps on the football field”) as their primary reason for being muscular. However, external gratification (e.g., “to look good for women and to intimidate other guys”) was also an oft-cited reason for wanting to be muscular among participants in this study.

Discussion

Quantitative Results

Taken together, the results of this study highlighted the relationship between masculinity, athletic identity, and the desire for college football players to be muscular. Our first hypothesis received mixed support. Certain traditional norms of masculinity (i.e., Risk Taking, Emotional Control, Primacy of Work) were significantly related to DMS, while other hypothesized norms (i.e., Winning, Violence) were not significantly related. In support of our first hypothesis, the traditional masculine norm of Risk Taking was significantly related to DMS. The norm of Risk Taking has been linked to negative outcomes among men, including higher levels of alcohol use (Liu & Iwamoto, 2007) and engagement in sexually aggressive behavior, particularly when combined with problematic alcohol use (Locke & Mahalik, 2005). However, this Risk Taking norm was found to be significantly related to positive body image among female student athletes (Steinfeldt, Zakrjasek, Carter, & Steinfeldt, 2011). Thus, Risk Taking has produced mixed results within the literature, suggesting that interpretation of how this traditional norm of masculinity operates within athletic populations needs to take into account the unique context of intercollegiate sports. Additionally, the relationship between Risk Taking and DMS is noteworthy within the context, given the prevalence of anabolic steroid use in society and in sport (Buckley et al., 1988; Hruby, 2010). Because the drive for muscularity involves tangible on-field benefits related to becoming bigger and stronger, research needs to explore the degree to which athletes engage in risky behaviors (e.g., using performance enhancing substances) in order to achieve quicker results in building their bodies to be as powerful as possible.

Despite our first hypothesis to the contrary, the traditional masculine norms of Winning and Violence were not significantly related to DMS. Both were significantly correlated to DMS, but neither emerged as significant predictors of DMS in our regression model, after controlling for other factors. Although no research to date had previously examined how conformity to masculine norms influences men’s desire to be muscular, our hypothesis was based on traditional masculine traits (e.g., strength, assertiveness, aggression, competition) operating within the contact sport of football (Wellard, 2002; Whannel, 2007; Whitson, 1990). These traits align with norms of traditional masculinity (e.g., Violence) that are often associated with the “dark side of masculinity” (e.g., Brooks & Silverstein, 1995; Mahalik et al., 2005). Although sports are conceptualized as “masculinized” endeavors (e.g., Richman & Shaffer, 2000) where incidents of on-field violence and antisocial sports behaviors occur (e.g., Shields & Bredemeier, 2007; Steinfeldt, Rutkowski, Orr, & Steinfeldt, 2011), the results of this current study did not identify a significant relationship between the drive for muscularity and conformity to these particular masculine norms (i.e., Winning, Violence, Risk-Taking). Subsequently, future research is needed to better identify not only how masculinity socialization processes operate within sport, but also to examine if conformity to these norms influences participants’ desire to be muscular.

Finally, in support of our second hypothesis, Athletic Identity was significantly related to DMS. This finding suggests that the more a football player identifies with the athlete role, the more he desires to be muscular. Similar to DMS (e.g., Davis et al., 2005; Labre, 2002; McCready et al., 2005), athletic identity has also been linked to a host of negative outcomes in the literature (e.g., difficult transition from sport, Grove et al., 1997; anxiety, Masten et al., 2006; poor academic performance, Lewis, 1993). However, our qualitative results indicated that a desire to be muscular can be seen as
a functional task for football players. Perhaps considering the tremendous amount of effort and sacrifice that is necessary to succeed in sport (e.g., Simons, Bosworth, Fujita, & Jensen, 2007) might help us conceptualize this finding (that football players who strongly identified with their role as an athlete also reported a stronger desire to be more muscular). It is possible that there are positive and adaptive aspects (e.g., diligence, self-discipline, commitment) to both identifying with the athlete role and to the desire for muscularity, suggesting that these constructs may operate differently within athletic contexts.

Qualitative Results

The results of the independent coding process indicated the presence of multiple categories within the qualitative data. In support of our third hypothesis, reasons that were related to sport performance (i.e., Functionality category) were the most common responses among participants who were asked why they wanted to be muscular. When asked why he wanted to be muscular, one respondent stated, “to be stronger at my sport and my position,” while another player responded, “because it’s part of being an athlete—for your body not to break down in competitive situations, it must first be built up.” When asked about the benefits of being muscular, one respondent provided a relatively sophisticated physiological response:

“Larger muscles take a larger portion of the focus exerted on different parts of the body during physical stress. This allows for less stress on joints, tendons, and ligaments, not to mention the positive impact this can have on one’s self-confidence, mental stability, emotional stability, and even a person’s physical awareness.”

These responses, along with other similar responses in the data, indicated that many football players conceptualize the need for muscularity in functional terms. That is, not only do football players acknowledge the need for muscularity to increase performance on the field, they also suggested that a drive for muscularity can serve as a protective factor to ward off potential injuries in this often violent contact sport (e.g., Messner, 1990). Thus, it is possible that football players might readily conceptualize their body as “body-as-process” based on their perceptions of utilizing their body as a functional machine whose instrumentality is more important than its aesthetic value (Franzoi, 1995).

However, while football players did primarily endorse a “body-as-process” perspective, our qualitative findings indicated that conceptualizations of “body-as-object” are not removed from this context. When asked why they thought that men wanted to be muscular, reasons that were related to the category of External Gratification (e.g., physical appearance, vanity, sex appeal, compensation, conformity to social pressures) were the most common responses. External Gratification also represented the second highest category of responses for why football players responded that they wanted to be muscular. Thus, players acknowledged the role that social comparison (e.g., Festinger, 1954) and conformity to masculine norms (e.g., Mahalik et al., 2003) play in men’s desire to be muscular, including their own. Although they did acknowledge this sociocultural pressure when asked why they wanted to be muscular (i.e., If applicable, why do you want to be muscular?), their responses (30.7%) for themselves within this External Gratification category were significantly lower than the number of responses (57.0%) they endorsed for other men (i.e., Why do men want to be muscular?). When asked why men want to be muscular, one player stated, “to attract women and be showing off as a tuff (sic) guy,” while another player responded “the media and for some men it is seen as being masculine and not gay.” Additionally, another player stated:

Muscularity is a symbol of phallacy (sic) for some men. I honestly believe that when you see those huge macho guys that they might be lacking confidence and are trying to show it otherwise. Society says it too, that the bigger a man is, the more of a man he is.

Results like these, and similar responses found in the data, indicated that football players acknowledged sociocultural messages that link muscularity and masculinity. These messages put pressure on men to conform their bodies to meet these sociocultural standards (e.g., McCreary et al., 2005; Mussap, 2008; Smolak & Murnen, 2008).

Limitations

This study has a number of limitations to note. First, the experience of football players at
these three colleges may not generalize to the experience of other college football players in different geographic regions or from different backgrounds or different levels of play (e.g., NCAA Division I, NCAA Division III). Additionally, although this within-group investigation addressed a gap in the literature, the results would have been strengthened by providing a comparison group of nonathletes or athletes from other sports (e.g., cross-country, rugby, basketball). Doing so could help determine whether football players’ experiences with masculinity and muscularity differ from the experiences of other groups of men. Furthermore, the validity of our qualitative findings could be limited by our reliance on written responses to only three open-ended questions in the survey. Our findings could have been strengthened by triangulating the data with multiple sources (e.g., interviews, focus groups) and through other methods (e.g., member checks, follow up with participants to clarify the meaning of their responses). We encourage future researchers to employ rigorous mixed methods to further examine contextual masculinity within domains of interest. In sum, results should be interpreted in light of these limitations.

Future Research Directions

In contextually examining muscularity within this unique group of men, some of our significant findings did not support our hypotheses. For example, our finding that higher conformity to the masculine norm of Primacy of Work was significantly related to DMS was a result that neither conformity to masculine norms nor drive for muscularity theories would readily predict. However, upon further review of the CMNI-46, the items comprising the Primacy of Work subscale appear to resonate with the unique stressors and challenges facing collegiate student athletes. That is, student athletes are often expected to commit well over 40 hours a week in pursuit of their sport (e.g., practice, lifting weights, film study, position meetings; Simons et al., 2007), and seldom have time for outside employment. Thus, the items on the CMNI-46 that inquire about respondents’ primacy of work might cause college football players to not interpret work in the occupational sense, but rather to interpret work in terms of the commitment of their full-time endeavors in football. Thus, this finding (that college football players who strongly endorsed the norm of Primacy of Work were more likely to desire to be muscular) might be better interpreted if we consider that those respondents would engage in these behaviors if they more strongly endorsed the primacy of working to be a football player (rather than Primacy of Work in the occupational sense). Future researchers should explore this dynamic in greater detail in order to provide clarity on this finding within this unique context.

Additionally, our results indicated that the traditional masculine norm of Emotional Control was significantly related to DMS. Again, this result was not predicted by our hypotheses. In previous studies with college football coaches (Steinfeldt et al., 2010) and with college football players (Steinfeldt et al., 2011b), participants characterized emotions in terms of energy, adrenaline, or intensity—instead of affect—when asked about emotional experiences in football. Coaches and players reframed emotion not as happiness or sadness, but instead conceptualized emotion as a level of intensity and aggression that needed to be channeled in order to be successful on the field. Subsequently, the significant relationship between emotional control and drive for muscularity in this study could reflect a context-specific interpretation of emotion that operates in the domain of football. Future researchers should focus on contextually bound interpretations of emotion (e.g., Wong & Rochlen, 2008), particularly when examining traditionally “masculinized” domains (e.g., football, military).

Conclusion

Taken together, the results of this study provide insight into the experience of men who operate in a context that requires a degree of muscularity in order to be successful. The quantitative results of this study suggested that muscularity and masculinity represent related constructs among college football players, a finding that supports Helgeson’s (1994) assertion that muscularity and masculinity are often equated in American society. In addition to certain traditional norms of masculinity, identification with the athlete role was significantly related to participants’ desire to be muscular. Additionally, the qualitative results provided insight into
college football players’ unique beliefs and behaviors concerning masculinity within this functional context. This group of men operates within a context that requires increased musculature for functional purposes (e.g., increased athletic performance, decreased risk of injury), yet these young men also acknowledged reasons related to sociocultural pressures (e.g., appearance, sex appeal, conformity) that align with tenets of social comparison theory (Festinger, 1954). In sum, psychologists can benefit from results of research that examine musculature in a contextual and functional manner, which provides additional perspectives on the physical and psychological costs of the pursuit of musculature (e.g., Cafri et al., 2005).

References


atmosphere in college football. Manuscript submitted for publication.


Appendix A

<table>
<thead>
<tr>
<th>Coded category</th>
<th>Descriptive subcategories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internal gratification</td>
<td>a. for self-confidence</td>
</tr>
<tr>
<td></td>
<td>b. for self-esteem</td>
</tr>
<tr>
<td>2. External gratification</td>
<td>a. to look good</td>
</tr>
<tr>
<td></td>
<td>b. for sex appeal (to attract girls/guys)</td>
</tr>
<tr>
<td></td>
<td>c. to show off (vanity, ego)</td>
</tr>
<tr>
<td></td>
<td>d. to compensate</td>
</tr>
<tr>
<td></td>
<td>e. to get respect (or to intimidate others)</td>
</tr>
<tr>
<td></td>
<td>f. to conform to sociocultural pressures</td>
</tr>
<tr>
<td>3. Health</td>
<td>a. to be healthy</td>
</tr>
<tr>
<td></td>
<td>b. to get in shape (or lose weight)</td>
</tr>
<tr>
<td></td>
<td>c. for pleasure (it feels good to work out)</td>
</tr>
<tr>
<td>4. Functionality</td>
<td>a. to increase athletic performance</td>
</tr>
<tr>
<td></td>
<td>b. to be stronger</td>
</tr>
<tr>
<td>5. Don’t want to be muscular</td>
<td>a. I don’t want to be muscular</td>
</tr>
<tr>
<td>6. Other</td>
<td>a. write in response that doesn’t fit</td>
</tr>
</tbody>
</table>

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