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Body Image and Muscularity

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MUSCULARITY AND MASCULINITY

Many men today suffer from an "Adonis complex." Adonis was the Greek half-man, half-god who represented the ideal masculine body image—the V-shaped, muscular body. Unlike many women who strive to lose weight and achieve thinness, many men are in a pursuit of losing body fat while maintaining lean muscle mass. Dutton maintains that muscles symbolize health, dominance, power, strength, sexual virility, and threat. Because muscular men are perceived to embody these traditionally masculine traits, they may feel or aspire to feel more respected, admired, attractive, and confident.

"Threatened masculinity" theory, first discussed by Mishkind and colleagues, posits that the growing parity of women in Western culture has placed men in a crisis, leaving them to define their masculinity through the one thing that will forever distinguish them from the opposite sex—their bodies. As feminism has changed females' perceptions of themselves and their gender roles, the definition of masculinity and the way men view their maleness has also changed in the process. According to Gillet and White, men's quest for a muscular body is an attempt to establish dominance and reassert a social patriarchy among men and women. Because women are achieving more power and financial independence, they can be more selective in the mates they choose. Thus men are in a position of having lost many of their traditional bases for feeling masculine. As Klein argues in his book *Little Big Men*, the desire for a hypermasculine body may arise from men's growing insecurity about their gender role. Muscularity may be an attempt to preserve the traditional notion of the male role. In short, the relative importance of men's bodies in Western cultures seems to be changing.

CHANGING IMAGES OF MUSCULARITY

Although the "threatened masculinity" theory has yet to be proven scientifically, substantial evidence attests that societal standards and ideals for muscularity have changed dramatically. In our book, *The Adonis Complex*, Pope, Phillips, and I observe that contemporary actors, such as Arnold Schwarzenegger and Sylvester Stallone, dwarf Hollywood actors of yesteryear, such as James Cagney and Jimmy Stewart. Advertisers such as Calvin Klein use male models with perfect physiques to model clothes and underwear. Men's bodies are increasingly used in advertisements for products unrelated to the body. The proportion of undressed women in popular women's magazines (such as *Cosmopolitan*) has remained fairly steady over the last 30 to 40 years, while the proportion of undressed men has skyrocketed—from as little as 3% of ads in the 1950s to as high as 35% in the 1990s. Even male mannequins now possess larger genital bulges and more defined muscular builds. In 2000, in the *International Journal of Eating Disorders*, Leit and colleagues calculated that the average *Playgirl* centerfold man had lost 12 pounds of fat while gaining approximately 27 pounds of muscle over the last 25 years.

The socialization of these new muscular standards is evident in images aimed at children and adolescents. In 1999 Pope and colleagues documented trends over time in the muscularity of male action figures such as G.I. Joe. Like the Barbie doll, which is an unrealistic and unattainable female body image, today's G.I. Joe figure is just as unattainable by boys. A G.I. Joe figure in 1964 would have a 32-inch waist, 44-inch chest, and a 12-inch bicep if he were a man 5 feet 10 inches tall. This is a reasonable, attainable physique, similar to that of an ordinary man in reasonably good physical shape. G.I. Joe's 1998 counterpart, however, would have a 55-inch chest, a 27-inch bicep, and a 36-inch waist. Note that the bicep is almost as big as the waist—and bigger than that of the greatest body-builders of all time.

Researchers caution that media messages should not be underestimated in the impact they can have on how men feel about their bodies and general appearance. Men who fall short of these ideals often feel more dissatisfied with their appearance.

PERCEPTION, PREFERENCE, AND PERSONAL CONSEQUENCES

Silhouette figures, developed in 1983 by Stunkard and his colleagues, have often been used in assessing body image perception and ideals. (See Thompson and Gardner's chapter in this volume.) This measure appears reasonable for most women, but it is not effective with men: Figures reflect a thin-to-fat scale without any account for muscularity. Investigators and

their participants must discern what is meant when a larger male figure is chosen: Is the figure chosen because it is perceived as fatter, more muscular, or both?

To remedy this problem, Gruber and colleagues recently developed the somatomorphic matrix (SMM), a computer instrument that measures male body image perceptions using separate axes for fat and muscularity. Men are first presented with a "median" body image and may then click on one of four "buttons" on the screen to make the image more or less fat and more or less muscular. Men are asked to create the image that best represents their own body, their ideal body, the body of an average person their age and sex, and their perception of that most desired by the opposite sex.

My study of 154 heterosexual college men using the SMM found that satisfaction with appearance depends on satisfaction with muscle mass. Men perceived themselves to be fatter than they actually were and chose an ideal body with 25 pounds more muscle and 8 pounds less body fat. Muscle belittlement (believing that one is less muscular than is actually true) was significantly positively correlated with scores on depression and eating disorder scales. Self-esteem was significantly negatively correlated with muscle belittlement, muscle displeasure, dissatisfaction with bodily proportions, feeling out of shape, and not liking one's body.

In a 1985 study in the *Journal of Obesity and Weight Regulation*, Harmatz and colleagues reported that underweight men were comparable to, or even worse off than, overweight women in terms of negative self-view and low self-esteem. Underweight men were more dissatisfied with their build, felt less handsome, felt that they had less sex appeal, and felt lonelier. This body dissatisfaction was attributed to a lack of musculature.

In his chapter on the epidemiology of body dissatisfaction in this volume, Cash summarizes the results of *Psychology Today* surveys from 1972, 1985, and 1996. Over time, men's discontent with their chest and muscle tone seems to have increased substantially. Muscle dissatisfaction or muscle belittlement can lead to serious body image disorders, such as muscle dysmorphia, and to anabolic steroid use.

MUSCLE DYSMORPHIA

In her chapter in this volume, Phillips discusses the severe body image disturbance called "body dysmorphic disorder" (BDD). In 1993 Pope and colleagues described a specific type of BDD characterized by a preoccupation with body build or musculature, which initially labelled "reverse anorexia nervosa." They described nine men who suffered from this condition, out of a sample of 108 body-builders. These men became obsessed with weightlifting; all nine used anabolic steroids to achieve the opposite effect of anorexia nervosa—to be extremely muscular. In 1997 my colleagues and I

described this condition in more detail and proposed formal diagnostic criteria. Noting that it was not truly an eating disorder, we renamed it "muscle dysmorphia."

The first criterion of muscle dysmorphia is a preoccupation that one is too small and not sufficiently lean or muscular, even though one may be extremely muscular. Associated behaviors include long hours of lifting weights, excessive mirror checking, and excessive attention to diet. My colleagues and I studied men with muscle dysmorphia who reported spending an average of 5½ hours per day thinking about their perceived lack of size. By comparison, ordinary weightlifters spent about 40 minutes daily thinking about such things.

Secondly, this preoccupation causes clinically significant distress or impairment in social, occupational, and other important areas of daily functioning. Men with muscle dysmorphia sacrifice activities because of a compulsive need to maintain their workout and diet schedules. Indeed, they are so consumed by working out that they may miss an important event, such as a final exam or job interview. They may try to adhere to a strict diet—for example, never eating in restaurants because the caloric content of the food is unknown. Some men have reported giving up promising careers because their jobs did not accommodate their obsessive need to work out.

These intrusive preoccupations also interfere with relationships. One man avoided sex with his wife, for fear that he would waste energy better used in workouts. Another man abstained from kissing his girlfriend, concerned that she might transmit calories through her saliva. Many men with muscle dysmorphia report sexual and intimacy problems due to their negative body image—feeling they are too ugly and weak looking.

Avoiding situations where the body is exposed to others or enduring such situations with marked anxiety is another symptom of muscle dysmorphia. Some men may not take their shirts off when at the beach, feeling that they look too small. Others wear layers of clothing to appear more muscular. Some men may become housebound for days because they feel so out of shape.

Men with muscle dysmorphia may continue to work out, diet, or use performance-enhancing substances despite knowledge of adverse consequences. For example, they exercise compulsively despite pain and injuries, or they continue to abide by their ultra-low-fat, high-protein diets even when hungry. Many take potentially dangerous anabolic steroids and other drugs to bulk up, because they think they do not look big enough.

Causes of muscle dysmorphia likely include a combination of genetic, psychological, and sociocultural contributions. Viewed as part of the spectrum of obsessive–compulsive disorders (OCD), muscle dysmorphia is hypothesized to share an underlying biological or genetic predisposition. BDD and OCD share common phenomenological features and may run in families. Psychologically, men with muscle dysmorphia typically have low self-

esteem and may have issues with gender identity. Psychosocial experiences such as having been teased may have some impact. Society likely plays a powerful role by increasingly broadcasting messages that "real men" have big muscles and that a lack of muscles reflects a lack of masculinity, of virility.

The sport of body-building or weightlifting should not be pathologized. In a paper in the *Harvard Review of Psychiatry*, I differentiate the many factors that distinguish muscle dysmorphia from ordinary weightlifting. Such factors include the value an individual assigns to his appearance, the presence of body image distortions, and engaging in any unhealthy behaviors associated with the exercise routine, such as bulimic behavior or anabolic steroid use.

ANABOLIC STEROIDS

Pope and Brower describe androgenic–anabolic steroids (hereafter referred to simply as *steroids*) as including testosterone and a series of synthetic analogs of testosterone. These hormones promote lean muscle growth and strength. First used only by elite, competitive body-builders, steroids have now spread to other groups of men and boys. Pope, Phillips, and I estimate that 2–3 million men have used steroids. In a 1988 study in the *Journal of the American Medical Association*, Buckley and colleagues found that more than 6% of high school boys admitted having used steroids before turning 18. Other studies have produced similar statistics. Many males in these studies disclosed that they used steroids purely for body appearance ideals rather than for athletic ideals or goals.

Physical side effects of steroids can include acne, breast enlargement, and liver cancer. A significant side effect is arteriosclerosis, a chronic disease in which thickening and hardening of arterial walls interfere with blood circulation and may lead to heart attacks and strokes. Psychological side effects include mood disturbances, psychotic symptoms, and severe aggressiveness, also known as "roid rage." Research on muscle dysmorphia and steroid use is in its infancy; however, preliminary studies suggest that men with body dissatisfaction (particularly muscle belittlement), low self-esteem, perfectionistic personality traits, and a traditional masculine gender ideology may be more at risk for developing these problems.

GAY MEN AND MUSCULARITY

Previous studies have reported that gay men are overrepresented in samples of men with body image disorders. This may lead to the inaccurate conclusion that body image disorders hardly affect heterosexual men. Most of

these studies have utilized clinical versus community samples. Pope and colleagues have noted that although most of the patients and research participants they have encountered were heterosexual, the majority of them had never sought treatment. The percentage of men who seek treatment for these problems is thought to be considerably lower than what is seen in women who suffer from similar issues. Gay men may be more willing to discuss such body image concerns and seek treatment. One study by Pope and colleagues, using the SMM, found a larger discrepancy between actual body and ideal body in heterosexual men than homosexual men.

As Rothblum documents in her chapter in the present volume, gay men do have body image concerns, specifically concerns about muscularity. In his book *Life Outside*, Signorile discusses how the pursuit of muscle has become common in gay communities. He notes that many gay men who experience internalized homophobia may seek a large, muscular build in an effort to appear masculine—and, more importantly, heterosexual. Although this motivation for muscularity is also held by heterosexual men, the gender identity of gay men is almost always called into question. Developing a large, tough exterior may be an effort to lay to rest all questions regarding one's sense of masculinity. Signorile also points out that gay men become invested in building a more muscular body to distance themselves from the image of the wasting syndrome associated with AIDS. As previously mentioned, muscularity symbolizes health and sexual virility. Thus, in the gay community, a fit and muscular body may convey HIV-negative status. Signorile observes that the use of steroids has become a problem among gay men who, like many heterosexual men, try to prove their masculinity through their muscularity.

RESEARCH AND CLINICAL IMPLICATIONS

Since the issue of body image and muscularity in men has emerged in the last two decades, a multitude of questions remain unexplored. Etiological factors for muscle dysmorphia must be analyzed more carefully, paying attention to family histories of psychiatric illness, peer experiences, and cultural exposure. Further research should examine the association between muscle dysmorphia and personality disorders as well as gender ideology and behaviors. The degree to which muscularity concerns transcend, or do not transcend, cultural, ethnic, sexual orientation, and socioeconomic groups remains unclear. Most current studies have been comprised of Caucasian heterosexual males from 15 to 30 years old.

Although this chapter has discussed body image and muscularity in relation to men, new research indicates that women are not immune to muscularity concerns. This finding should come as no surprise; more women are entering the athletic arena, and the pressure to be fit and toned is gaining as

much popularity as the pressure to be thin. In 1999 Gruber and Pope reported in *Comprehensive Psychiatry* that a history of rape was common in a sample of women who were compulsive weightlifters and steroid users. Research with female athletes, body-builders, and nonathletes will be helpful in understanding the impact these concerns may have on women.

In clinical settings, we must recognize the association between muscle belittlement, depression, and eating disorders. Indeed, muscle belittlement may serve as a diagnostic signal to assess for depression or eating pathology in men, much as fat exaggeration may alert the clinician to eating disorders in women.

Treatment studies on muscle dysmorphia, per se, are lacking. The vast majority of men with these symptoms never presents for treatment. Consumed by their obsessions, they spend much of their time at the gym or worrying about their appearance. They also experience an enormous sense of shame and embarrassment about having this disorder. Therefore, it is important for clinicians to emphasize the patient's courage in seeking help and reassure him that he is not "vain," "narcissistic," or a "sissy" for having these feelings.

Pope, Phillips, and I hypothesized that since muscle dysmorphia is a form of BDD, it would be likely to respond to treatments previously found to be effective for other forms of BDD, such as cognitive-behavioral therapy and use of certain antidepressants. Psychotherapy should consider other contributing issues, such as gender identity, low self-esteem, and peer experiences. Psychoeducation is a necessary part of treatment and prevention, including information on proper nutrition, healthy exercise, the dangers of steroids, and the distortion in media images that espouse an inaccurate representation of what people look like or should aspire to attain, appearance-wise.

Concerns over muscularity are expected to continue to increase. Research on the prevention and treatment of muscle dysmorphia is essential to enhance our scientific and clinical understanding of this phenomenon.

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