Body Image, Weight, and Self-Concept in Men

Abstract: *In the traditional debate between biological and environmental determinants of body weight, the body has most often been explored in terms of its anatomical, genetic, or hormonal influences on personality, experience, and behavior. While obesity has been identified as a threat to our public health, correlating attitudes toward body image and self-concept have been explored within women to a limited extent, and even less so in relation to men. Consequently, men's body image will be discussed in light of current literature reveals for women. For men, as for women, as the social pressure to attain an "ideal" physique increases, the discrepancy between that ideal and one's body increases as well. This dynamic is more readily recognized for women than for men. As men are socialized not to discuss their body image concerns, negative self-concept and esteem may reinforce behaviors resulting in weight gain. In recent years, the proliferation of media has served to reinforce messaging related to one's body. This review of existing data and literature suggests that body image and self-concept are related to body weight in men (as with women) and need to be addressed as part of healthy weight management practices.*

Keywords: obesity; body weight; body image; men's health; self-concept

The American experience of body beautiful as portrayed by media has long imposed a need for thinness. The history of the diet industry, however, has never been fully written and even less so as it relates to boys and men with regard to their body weight and self-concept. It is as if modern society is in denial about this blatant societal affliction and sociological "maladjustment" to our bodies. By comparison, rates of overweight and obesity in North America

related to body mass index fails to provide insight into dimensions of relationships that may be relevant to understanding the epidemic of obesity with regard to social changes in our culture. Still, there is little research in the areas of intersection related to body image and body weight in men.

The sexual revolution and feminist movement changed the constructs of masculinity and femininity from traditionally rigid terms, allowing for a

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have far surpassed the prevalence of those at a "normal" or "healthy" body weight.^{1,2} While obesity has widely been identified as a great threat to our public health, it is perhaps the by-product of other ailments in our society as they relate to deficient attitudes toward body image and self-concept for men and women. This concept has been explored within women to a limited extent, and even less so in relation to men. The dearth of scientific literature pertaining to the social constructs such as fear of intimacy and body image avoidance as

greater shift in gender roles which has continued to evolve over the past several decades.³⁻⁵ Feminist theorists support this concept that male-driven industries, including media, advertising, cosmetics, and so forth, conspire to control and contain women's power and to profit from an industry created to promote dissatisfaction. Notable and outspoken advocates for this movement such as Naomi Wolf and Jean Kilbourne suggest that these industries manufacture anxiety about weight and appearance as a backlash toward the feminist movement.⁵

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Conversely, little has been said about the same industries now targeting men in much the same manner. It is often suggested by mass communication theorists that the goal of advertising is to create a sense of deficiency within its audience, resulting in efforts and acquisitions aimed at fulfillment. For the male, to perceive himself as being unable express control over his life or of his own physique may result in feelings of emasculation.⁶

Current research is attempting to explore the reasons behind body image dissatisfaction in men and the outcome that occurs for these men. Throughout history, gender roles and norms have governed expectations of behavior. In the context of body image, a difference between men and women can be attributed to these roles and norms that discourage men from talking about things like their body image concerns or their related self-esteem whereas women are encouraged to have these conversation and find social relation through these concerns.

The diet industry, as it has evolved in targeting women has been well documented over time. Current magazine and television commercials are saturated with advertisements for products and services designed to enhance the body and elevate ones' self-esteem reflected as an overall self-appraisal of one's own worth as well as an attitude toward the self.^{7,8} This association is not new; in 1944, *Seventeen* magazine had made its first appearance, preying on the vulnerabilities of adolescent girls. Teenage girls were encouraged to go on sensible diets, enforcing the credo set in place by the marketing of Ry-Krisp crackers—"Nobody Loves a Fat Girl." As *Playboy* magazine hit newsstands in 1953 with Marilyn Monroe on its debut cover, boasting a curvaceous figure, increasing "liberation" and self-control experiences by women were beginning. By the 1960s, advertising and marketing sectors of the American economy continued to be male driven, with messaging aimed at women, while a shift in gender roles in North America had begun and men began to become targets of these same marketing

tactics. The women's liberation movement and of the advent of medical forms of contraception were integral to this revolution. This increasing "liberation" and self-control experiences by women also spawned a new ideal as demonstrated by the fashion icon of 1960s: Twiggy. Weighing in at only 92 pounds, Twiggy had body measurements of 31-24-33, whereas Marilyn Monroe, who was the epitome of body beautiful ideals only 10 years earlier, boasted a robust 37-27-35 figure. Oddly enough, as women asserted their femininity and rights, Twiggy exemplified the androgen ideal. This notion of the infantilized body is still prevalent in our society 50 years later, and increasingly, it applies to men as well as women. Any surface examination of a late 1970s *Gentlemen's Quarterly* magazine will showcase chest hair, while a recent audit of men's magazines finds chest hair virtually extinct.^{6,9} Just as the preoccupation with female grooming of the legs and armpits serves to infantilize femininity, we can observe this trend with regard to male grooming of body hair. Within the past 35 years, the proliferation of media in its many forms have come to prey on the body image and self-esteem concerns of male and female consumers, while society has experienced an escalating prevalence of overweight and obesity.^{10,11}

Body Image and Rates of Obesity

The social implications of being overweight or obese in our society are clear and pronounced. As the social pressures for thinness and the associated stigmatization of obesity have increased, so has the rate of obesity.^{1,12} Body mass index (BMI), expressed as weight in kilograms divided by height in meters squared (kg/m^2), is commonly used to classify overweight (BMI 25.0-29.9 kg/m^2), obesity (BMI $\geq 30.0 \text{ kg}/\text{m}^2$), and extreme obesity (BMI $\geq 40.0 \text{ kg}/\text{m}^2$). Results from the 2011-2012 National Health and Nutrition Examination Survey (NHANES), indicate that more than two-thirds (69.0%) of adults are considered to be overweight or obese.¹ NHANES

2009-2010 data for adults in the United States aged 20 years and older revealed an increase in obesity between the late 1980s and the 2009-2010 report, with the estimated age-adjusted prevalence moving upward from a previous level of 23% in the NHANES (1988-1994) to approximately 35.1% in 2011-2012.^{1,2} Among women, however, no significant change was observed between 1999-2000 and 2011-2012. Among men, there was a significant increase between 1999-2000 and 2011-2012 with obesity in men increasing from 27.5% to 33.7%.^{1,2} Additionally, the prevalence of obesity among boys increased from 14.0% in 1999-2000 to 16.7% in 2011-2012.^{1,2}

NHANES data confirm that the percent of obese adults varied little from 1960 to 1980, but has increased considerably thereafter.¹ A genetic contribution to a human trait is quantified by comparing the trait's variation between identical and nonidentical twins. Adoption, twin, and family studies have consistently shown that obesity has a strong heritable component, with approximately 30% to 70% of variability in body weight or fat mass being genetically determined.² Using this approach, other studies differ in the concluded heritability of obesity—with ranges between 70% and 80%.^{13,14} These values exceed those for most other traits that are commonly accepted to have a biological basis, including diabetes, heart disease, and cancer. No study can completely attribute obesity to genes in the absence of environment and behavior modeling.

While obesity is understood to be rooted in genetics, it leaves a large component of flux in body weight unexplained by genetic mechanisms further failing to explain the recent epidemic prevalence of overweight and obesity when considering that the genetic composition of the population does not rapidly change.^{13,14} Despite this increasing prevalence among men, weight loss and weight preoccupation is still socially considered a gendered (female) preoccupation.^{3,4,7} Conversely, due to the prevalence of overweight and obesity in our society at 69%,¹ psychology's almanac—the *Diagnostic*

and *Statistical Manual of Mental Disorders (DSM)*—is unable to consider overweight and obesity as a disorder with psychological implications.¹⁵

Social and Psychological Implications of Body Image Concerns

Among overweight and obese segments of the population, as the pressure for thinness increases, the discrepancy between desirable body weight and actual body weight increases as well.^{1,12} Body image, as a subjective assessment of one's own physical appearance established both by self-observation and by noting the reactions of others is affected by this relationship. The body image concerns of those who are in fact overweight reveals that the greater the dissatisfaction, the greater the resulting avoidance toward social interaction.^{10,16} In spite of the growing body of research, little has been reported to suggest a baseline for, or implications of the relationship between body image and body weight. Contributions from this research over the past decade have failed to find inclusion in prevention and treatment approaches to obesity, or to improving social interaction among those experiencing body dissatisfaction and considered to be “self-conscious.”

Body dissatisfaction among children and adolescents has been shown to result in avoidant behavior. Avoidant behaviors, including isolation, often involve lower levels of physical activity and may bear implications later in life when forming intimate relationships.^{10,17} This is especially important for overweight and obese boys, who are often excluded or selected last for sports or in gym class; negative experiences related to physical fitness only reinforce behaviors that lend to being overweight and obese. Body image dissatisfaction is well established as a risk factor for the development of eating disorders (according to the *DSM* criteria) but has rarely been considered toward the incidence of overweight and obesity. Body image is closely related to the experience of romantic relationships and

can affect both the quality and quantity of sexual and intimate experiences.^{9,18,19} Avoidant behavior has also been examined as an external, behavioral manifestation of body image concerns for both men and women; self-perceptions of social attractiveness were positively related to the intimacy achieved in interaction.²⁰ Individuals who feel insecure of, or in, their interpersonal attachment—characterized by anxiety that manifests in avoidant behavior—may also exhibit insecurity about physical worth. For both sexes, greater body image dysfunction was correlated to less secure general attachment, including more preoccupied general attachment and more anxious romantic attachment.¹⁹ Body image disturbance has also been found to characterize individuals with eating disorders and has been found to exist with greater prevalence in the overweight and obese.²¹⁻²⁴

Research has demonstrated that poor body image would result in poor quality and frequency of intimacy—yet the topic has infrequently been studied, and rarely considered in men. A 2004 study¹⁹ on body image, sexual self-schemas, and sexual functioning among college women and men demonstrated a strong relationship between romantic attachment and body image dysfunction for men and women, and it was also the first study of its kind to include men in the study sample. In addition, little literature is available that includes the treatment of body weight in this discussion. A 1985 study found that, for women, the use of food provided a means of denying sexuality, affection, and sexual desire.²⁵ Two decades later, the focus of a 2004 study examined insecure attachment correlated in men and women to a high degree of body image dysfunction; the study is one of few that have been conducted to examine the relationship of body image (measured by avoidant behavior) and intimacy (measured by avoidant behavior). This relationship is important, given the findings that reveal body weight (BMI) as being closely tied to body image and body image as an

important factor involved with intimacy.¹⁹ Research has supported the everyday observation that links women's sexuality and body image in a logical fashion—that poor body image will result in poor quality and frequency of intimacy—yet the topic has been infrequently studied and rarely considered in men.

Research and practice have moved toward considering gender in their study of body image, intimacy, and BMI, but despite exhaustive searches, these findings are limited and fragmented. The 1999 study by Nezelek,²⁰ “Body Image and Day-to-Day Social Interaction,” found that for both men and women, self-perceptions of attractiveness were positively related to the intimacy they found in interaction. Many studies in the area have examined only female subjects, while men are increasingly internalizing the sociocultural mores about attractiveness¹⁹ and are still becoming the larger cohort of obese Americans as compared with women.¹

Learned social behavior can modify sexual activity based on the positive and negative attributes ascribed to body image that affect self-esteem, and weight bears significant social implications. In a study examining relationships between obesity and major depressive disorder within a general population found clinically obese women to be 37% more likely to have experienced major depression during the past year compared with average-weight women. Comparatively, for men, being underweight—not obese—was associated with increased risk for major depression. The suggestion is that body weight bears psychosocial consequences that differ based on gendered implications of body weight.²⁶ In line with their female counterparts, men who experience shame with regard to their bodies may be apprehensive about showcasing their bodies during sexual activity. However, as masculine sexual scripts in our culture prescribe that men be sex driven, this shame may not prevent engagement in sexual activity. Rather than withdrawing physically from sexual activity, men may remain engaged in sexual activity but may be emotionally

withdrawn to create a safeguard and distance from any potential negative evaluations.^{7,26} As men learn about the male body ideal, media and sociocultural markers transmit messages about this evolving ideal that is enhanced by a number of new products and services available in the marketplace.

An important emerging issue in the marketplace is the availability and advertising of treatments and medications in response to the natural progression of aging and to the normal range of human emotions that supports messaging about body image for men. Marketing of products and services that provide enhancements to what had previously been seen as normal functioning or part of the aging process is ever increasing.²⁷ This evolution has supported a health care industry whose role and function is not to correct what is *medically wrong*, but instead, as provisions for those who just want to *be better*.⁸ This approach is quite logical as a marketing tactic preying on the subjective assessment of one's own physical appearance established both by self-observation and by noting the reactions of others—the very definition of body image. Women have long been consumers of these industries with procedures and services ranging from electrolysis and collagen injections to breast augmentation. Increasingly, men are undergoing cosmetic procedures in response to male pattern baldness and are obtaining medications to enhance lifestyle—the best known of these is sildenafil citrate (Viagra) in response to erectile dysfunction.^{28,29}

Gender, Sexuality, and Body Image

In 2005, the American Obesity Association reported on the significant impact of morbid obesity (BMI ≥ 40 kg/m²) on quality of life with regard to physical intimacy, social interactions, and employment opportunities to comprise some of the barriers faced by this segment of the population. This was the first report of its kind to address sexuality of the obese in such a fashion.

The study, which surveyed 519 obese American men and women (aged 21–72 years), indicated that of the nearly 40% of surveyed participants in committed relationships, their frequency of sexual intimacy with their partners was less than once per month. By comparison, only 17% of the general population reported frequency of sexual intimacy at less than once per month. The survey also reported that during these intimate moments, weight resulted in feelings of embarrassment, furthering physical and emotional withholding and served to affect the frequency of intimacy—if able to be physically intimate at all.³⁰ It would seem reasonable to believe that a linear relationship may exist between body weight and intimacy, also affecting those persons who experience obesity to a lesser degree (BMI < 40 kg/m²).

Another study followed over 1000 clinically obese men and women (as classified by BMI) in treatment-seeking and non-treatment-seeking settings. Through the Impact of Weight on Quality of Life–Lite questionnaire (IWQOL-Lite) it was found that 43.4% of women and 71.2% of men never or rarely enjoyed sexual activity. 38.8 percent of women and 56.1 percent of men indicated little sexual desire; 43.5% of women and 50.6% of men reported difficulty with sexual performance. Interestingly, 45.3% of women and 64.5% of men avoided sexual encounters,³⁰ reinforcing previous findings that suggest that rather than withdrawing physically from sexual activity, obese men may remain engaged in sexual activity but may be emotionally withdrawn to create a safeguard and distance from any potential negative evaluations.²⁷ With the increasing prevalence of obesity among men, sexual issues are likely affecting more men than realized. Furthermore, as men are increasingly subject to messaging about their bodies and body parts, sexual issues are likely affecting even more men than those who are obese. Beliefs about sexuality and sexual behavior of those who are overweight and obese is an important and often overlooked issue as obese individuals are rarely depicted in a sexual light in

mainstream media, nor often considered in sexual terms in research studies.^{3,4,30,31} Additional research suggests that body surveillance partially mediated the relation between exposure to sexually objectifying television and magazines and body shame, appearance anxiety, and body image self-consciousness during physical intimacy.¹¹ One may deduce that such heightened surveillance of the body may result in avoidant behavior within the interpersonal realm.

Numerous studies have reported links between sexuality and body dissatisfaction, dieting, and binge eating behavior, however, failing to speculate that sexuality and obesity hold a connection as well where obesity may serve as a reaction to sexual psychopathology. Studies have long established a relationship between sexual orientation and eating psychopathology where homosexuality in men serves as a risk factor for the development of eating disorders, and serves as a protective factor in homosexual women.^{32,33} These findings have been extrapolated from, and built on, findings from studies on women only. Femininity has long been studied with regard to body image and its relationship with intimacy,¹⁹ mainly because research on the subject matter has been based on female samples. Body image disturbance has been found to characterize individuals with eating disorders, and has been found to exist with greater prevalence in the overweight and obese—and mainly within female samples.^{19,21,22} The identification of risk factors for the development of body image disturbance and eating disorders have gained an increasing recognition of gender roles and sexual preferences.

With the increased importance of thinness in the feminine role resulting from a Western thin ideal, along is the increased incidence of eating and body image disturbance associated with femininity.^{34–36} This is highlighted by the 2005 study,³⁴ which examined sex differences in body image change and its correlates over the course of a 12-week strength-training program for men and women. Significant body image

improvements were found for both sexes ($P < .05$); however, the correlates of body image change varied between the sexes. The rationale for this was that women generally reported more body image dissatisfaction than men, providing them with greater opportunity for change. In a 2007 study,³⁵ the relationship between feminine gender role stress and disordered eating symptomatology in a sample of 124 women, aged 18 to 40 years, was examined. Fear of being evaluated as unattractive correlated with dietary restraint, eating concern, as well as bingeing and purging behaviors. The results indicate that the stress of conforming to the feminine gender role is associated with a range of unhealthy body attitudes and behaviors.³⁵ In our fat-phobic society, where female self-worth is so intimately tied to a slim figure and male self-worth is tied to muscle mass and its inherent machismo, these biological differences have critical and distinctive emotional consequences.²⁵

Feminist theorists support the concept that traditionally male-driven industries, including media, advertising, cosmetics, and so forth, have conspired to promote widespread dissatisfaction of women's bodies.⁵ It is common and expected that women be unhappy with their bodies; this feeling has been termed "normative discontent."³⁷ This normative discontent, when applied to the aforementioned early psychoanalytic theories on obesity, may include sexuality (as experienced through intimacy) as a modern extension of this normative discontent in a society consumed with sexual liberties.^{5,6,10} The concept of "normative discontent" has been referenced a great deal within women; however, the extent to which body dissatisfaction and its correlates of body image concerns and eating disturbance among men is quite similar.³⁸ As is the case for women, men's body dissatisfaction has been linked to health consequences, including excessive exercise, eating pathology, steroid use, depression, and low self-esteem.^{9,39} Some research suggests, however, that men and women's eating disturbance and

body image concerns are more even similar than one might believe.⁴⁰ For example, in a large sample, 10.0% of women reported binge eating once weekly compared with 8.0% of men. Laxative misuse also varied little between women and men, 3.1% compared with 3.0%, respectively.³⁸

As cultural tastes evolve, that which is normative—or normally occurring—falls less and less in favor as compared with what can be improved on through products and procedures available in the marketplace.³⁸ While body hair on men was once perceived as a sign of masculinity and virility, there has been a clear shift in the use of hairless, bare-chested men in advertising. A 2008 study³⁹ found that on average men wanted to be thinner, more muscular, have a fuller head of hair, and less hair on their bodies. It is not a small subset of narcissistic men who experience dissatisfaction, but rather a substantial proportion (>50%). Additionally, these men who were dissatisfied by their weight, natural muscularity, height, and body hair also demonstrated lower overall self-esteem related to appearance. One distinguishable feature is the extent to which control is perceived—for example—while body hair is not controllable, its depilation is. With the current cultural emphasis on obesity, body weight concerns were demonstrated to have the largest implications for self-concept as demonstrated by this study.³⁹

Through modern modes of communication, advertising has a newfound ability to target and tailor messages, and to deliver them in print, through broadcast and digital media like never before. Additionally, the professional constituency of this industry has changed immensely in the past few decades. The 2012 US Census data report that females are currently very well represented within professional fields of marketing and advertising with 55.7% of women occupying the field of market and survey research, 45.2% working as marketing and sales managers, 47.6% as advertising sales agents, 58.8% as public relations specialists, and 67.9% as media

and communication workers.⁴¹ It would therefore stand to reason that over time, these traditionally male-driven industries are now including men as the target of national campaigns for products and services aimed at improving one's physique and overall appearance. Major weight loss companies have begun to target men as have manufacturers of women's 'shapers' and 'minimizers' have done the same by introducing "compression tank tops" and love handle minimizing undergarments. Conversely, the 2012 US Census also reports that within professional fields that deal with body weight and self-concept, these fields are also dominated by women, representing 92.3% of dietitians and nutritionists, 66.7% of psychologists, and 71.2% of counselors.⁴¹ The field of men's health in exploring issues related to body weight, body image, and self-concept is slow to uncover these issues that are rapidly becoming critical in our society. This is challenged even further by the lack of academic centers of men's health research by comparison to those focused on women's health.

Implications of Body Image and the Epidemic of Obesity

The epidemic of overweight and obesity in men and women continues to escalate and results in increased risk for diseases and diminished quality of life. Considerable research exists on obesity and on sexuality as separate issues; few theories address their interrelation; even less research examines the implications of body image, self-concept, or gender. Psychological theory provides a framework for better understanding these issues within the individual; however, the epidemic of overweight and obesity in our society has statistically marginalized those who are "normal" or "healthy" weight from psychological focus. Accordingly, psychological theory has not well translated into practice. As aforementioned, the prevalence of overweight and obesity in our society at 69%¹ precludes psychology's almanac—the *DSM*—from regarding overweight

and obesity (or their psychological manifestations) as a disorder with psychological implications.¹⁵ As a consequence, psychologists are poorly trained to address the psychological implications of body weight. This is compounded by the fact that this epidemic is still relatively new where evidence-based research and practice are able to demonstrate success in addressing these issues.

The psychology of human beings is adaptive such that we behave in a manner in line with appeasing our cognitive mandates. As a society, we continue to grow in size. Perhaps this adaptive physical restructuring is psychologically functional. The absence of depicted physical ideals in media that resemble those naturally occurring within society, act as reinforcement for conceptions and perceptions of body beautiful.^{5,10} As health researchers and professionals involved in the delivery of competent care, due attention needs to be paid to the health issues affecting men, including overweight and obesity, with consideration of body image and self-concept and how these issues reinforce one another in a cyclical manner. Sadly, this area is challenged by a paucity of formal academic men's health research institutes. While the aforementioned NHANES data¹ state that among men, there was a significant increase between 1999-2000 and 2009-2010 with obesity in men increasing from 27.5% to 35.5%, this may simply be due to the fact that men are less likely than women to be targeted by advertising for weight loss (most weight-related programming and advertising is still geared toward women¹¹) seek counsel for weight management or to discuss concerns with a physician. This, however, is all the more reason for needed attention in this area, both in research and in practice. The issue of obesity must be addressed and understood as a possible symptom related to underlying emotional problems rather than focusing solely on excess body weight as a problem to be remedied.

Obese individuals commonly experience stigmatization, discrimination, and prejudice because of their weight—a physical condition that is not protected in

our society—and poorly understood both in terms of psychological impetus as well as consequence. Negative self-valuations, esteem, and poor body image present social and psychological barriers, and may be found more commonly among men who are socialized to be less emotive about these vulnerabilities. It is likely that many overweight and obese individuals would wish to discuss these issues with their health care providers and thus it is important that providers be attuned to these issues to support physical and emotional well-being within their patients. Posing some basic questions related to self-concept and not physical health (ie, “How do you feel about yourself” vs “How do you feel?”) providing perspective and discussing prevalence so as to normalize concerns are helpful techniques. Providers may also highlight possible benefits that may result from changes in lifestyle and engagement with counseling therapy programs to address body image and self-esteem—not just with regard to physical health. At present, there are few programs that specifically support men in this regard and few resources available for clinicians to support their patients. The formal examination of the dynamics of gender and body weight, body image, and self-esteem, become focal in understanding the motives and resolve for healthy weight management and positive body image ideation in driving supportive programs and practices forward.

Declaration of Conflicting Interests

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References

- Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2011-2012. *JAMA*. 2014;311:806-814.
- Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity and trends in body mass index among US children and adolescents, 1999-2010. *JAMA*. 2012;307:483-490.
- Jagstaidt V, Golay A, Pasini W. Relationships between sexuality and

obesity in male patients. *New Trends Exp Clin Psychiatry*. 1997;13:105-110.

- Jagstaidt V, Golay A, Pasini W. Relationships between sexuality and obesity in female patients. *New Trends Exp Clin Psychiatry*. 2001;17:69-77.
- Brumberg JJ. *Fasting Girls*. Cambridge, MA: Harvard University Press; 1988.
- Brumberg JJ. *The Body Project*. New York, NY: Random House; 1997.
- Schooler D, Ward LM. Average Joes: men's relationships with media, real bodies, and sexuality. *Psychol Men Masc*. 2006;7:27-41.
- Lexchin J. Bigger and better: how Pfizer redefined erectile dysfunction. *PLoS Med*. 2006;3(4):e132. doi:10.1371/journal.pmed.0030132
- Cafri G, Yamamiya Y, Brannick M, Thompson JK. The influence of sociocultural factors on body image: a meta-analysis. *Clin Psychol Sci Pract*. 2005;12:421-433.
- Murnen SK, Don BP. Body image and gender roles. In: Cash TF, ed. *Encyclopedia of Body Image and Human Appearance*. San Diego, CA: Academic Press; 2012: 128-134.
- Aubrey J. The impact of sexually objectifying media exposure on negative body emotions and sexual self-perceptions: investigating the mediating role of body self-consciousness. *Mass Commun Soc*. 2007;10:1-23.
- Maner JK, Kenrick DT. When adaptations go awry: functional and dysfunctional aspects of social anxiety. *Soc Issues Policy Rev*. 2010;4:111-142.
- Choi BCK, Hunter DJ, Tsou W, Sainsbury P. Diseases of comfort: primary cause of death in the 22nd century. *J Epidemiol Community Health*. 2005;59:1030-1034.
- Farooqi S, O'Rahilly S. Genetics of obesity in humans. *Endocr Rev*. 2006;27:710-718.
- Devlin MJ, Yanovski SZ, Wilson TG. Obesity: what mental health professionals need to know. *Am J Psychiatry*. 2000;157:854-866.
- Park LE. Appearance-based rejection sensitivity: implications for mental and physical health, affect, and motivation. *Pers Soc Psychol Bull*. 2007;33:490-510.
- Haines J, Neumark-Sztainer D. Prevention of eating disorders and obesity: a consideration of shared risk factors. *Health Educ Res*. 2006;21:770-782.
- Wiederman MW. Body image and sexual functioning. In: Cash TF, Pruzinsky T, eds. *Body Image: A Handbook of Theory, Research, and Clinical Practice*. New York, NY: Guilford Press; 2002:287-294.

19. Cash TF, Theriault J, Annis NM. Body image in an interpersonal context: adult attachment, fear of intimacy, and social anxiety. *J Soc Clin Psychol*. 2004;23:89-103.
20. Nezelek JB. Body image and day-to-day social interaction. *J Pers*. 1999;67:793-816.
21. Cash TF. The psychology of physical appearance: aesthetics, attributes, and images. In: Cash TF, Pruzinsky T, eds. *Body Images: Development, Deviance, and Change*. New York, NY: Guilford Press;1990:51-79.
22. Cash TF. Body image attitudes among obese enrollees in a commercial weight-loss program. *Percept Mot Skills*. 1993;77:1099-1103.
23. Silberstein L, Striegel-Moore R, Timko C, Rodin J. Behavioral and psychological implications of body dissatisfaction: do men and women differ? *Sex Roles*. 1988;19:267-307.
24. Garner DM. The body image survey results. *Psychol Today*. 1997;30:75-84.
25. Beach V, Martin D. Obesity, sexuality and psychological treatment for women. *Women Ther*. 1985;4:53-60.
26. Carpenter KM, Hasin DS, Allison DB, Faith MS. Relationships between obesity and DSM-IV major depressive disorder, suicide ideation, and suicide attempts: results from a general population study. *Am J Public Health*. 2000;90:251-257.
27. Gillen M. Associations between positive body image and indicators of men's and women's mental and physical health. *Body Image*. 2015;13:67-74.
28. Janiszewski PM, Janssen I, Ross R. Abdominal obesity and physical inactivity are associated with erectile dysfunction independent of body mass index. *J Sex Med*. 2009;6:1990-1998.
29. Saigal CS, Wessells H, Pace J, Schonlau M, Wilt TJ. Predictors and prevalence of erectile dysfunction in a racially diverse population. *Arch Intern Med*. 2006;166:207-212.
30. Kolotkin RL, Binks M, Crosby RD, Østbye T, Gress RE, Adams TD. Obesity and sexual quality of life. *Obesity*. 2006;14:472-479.
31. Pujols Y, Meston CM, Seal BN. The association between sexual satisfaction and body image in women. *J Sex Med*. 2010;7:905-916.
32. Heffernan K. Sexual orientation as a factor in risk for binge eating and bulimia nervosa: a review. *Int J Eat Disord*. 1994;16:335-347.
33. Meyer C. Sexual orientation and eating psychopathology: the role of masculinity and femininity. *Int J Eat Disord*. 2001;29:314-318.
34. Martin Ginis KA, Eng JJ, Arbour KP, Hartman JW, Phillips SM. (2005). Mind over muscle? Sex differences in the relationship between body image change and subjective and objective physical changes following a 12-week strength-training program. *Body Image*. 2005;2:362-272.
35. Mussap A. Short communication: the relationship between feminine gender role, stress and disordered eating symptomatology in women. *Stress Health*. 2007;23:343-348.
36. Weaver A, Byers ES. The relationships among body image, body mass index, exercise, and sexual functioning. *Psychol Women Q*. 2006;30:333-339.
37. Tiggemann M, Lynch JE. (2001). Body image across the life span in adult women: the role of self-objectification. *Dev Psychol*. 2001;37:243-253.
38. Tantleff-Dunn S, Barnes RD, Larose JG. It's not just a "woman thing": the current state of normative discontent. *Eat Disord*. 2011;19:392-402.
39. Tiggerman M, Martins Y, Churchett L. (2008). Beyond muscles: unexplored parts of men's body image. *J Health Psychol*. 2008;13:1163-1172.
40. Striegel-Moore RH, Rosselli F, Perrin N, et al. Gender difference in the prevalence of eating disorder symptoms. *Int J Eat Disord*. 2009;42:471-474.
41. US Census Bureau. *Statistical Abstract of the United States*. Washington, DC: US Census Bureau; 2012. http://www.census.gov/compendia/statab/cats/labor_force_employment_earnings.html. Accessed February 13, 2015.