2013

Virtual Ideals: The Effect of Video Game Play on Male Body Image

Zeely Sylvia

Follow this and additional works at: http://vc.bridgew.edu/undergrad_rev

Part of the Psychology Commons

Recommended Citation

Virtual Ideals: The Effect of Video Game Play on Male Body Image

Zeely Sylvia

Zeely Sylvia received her undergraduate degree from Bridgewater State in January 2013, graduating Summa Cum Laude with a major in Psychology. This research was funded by the ATP Summer Grant Program over the Summer of 2012. The project originated from her time working in the Psychology Department's Body Image Research Lab under the direction of Dr. Teresa King and Dr. Brendan Morse. It was presented at the BSU Summer Symposium in August of 2012, and more recently at the Eastern Psychological Association Convention in New York City in March of 2013. Zeely is currently working as a research assistant at The Weight Control and Diabetes Research Center in Providence, RI, and plans to apply to graduate programs for the Fall of 2014.

*P*opular media has long been cited as a negative influence on body image and self-esteem by perpetuating unrealistic ideals of the human body. However, the influence of video games has remained largely unexamined despite their growing popularity as a media form, particularly among men. The purpose of this study was to investigate whether playing video games that emphasize an unrealistic male body ideal has a negative impact on male body image. Male participants were randomly assigned to play a highly realistic video game with either a muscular character or a character of average build. Men in the muscular condition reported significantly more negative attitudes about their body (body esteem) and greater attention to muscularity than men in the control condition. Considering the wide-spread use of video games, as well as the increasing muscularity of the ideal male body in popular culture, this finding could have important implications for the psychological well-being of male gamers who are regularly exposed to unrealistic body ideals in video games.

The concept of body image encompasses all facets of an individual's relationship with his or her own body. This includes cognitions, emotions, and global satisfaction in regard to one's body, as well as behavioral aspects (Menzel, Krawczyk, & Thompson, 2011). Body image dissatisfaction (BID), defined by Crowther and Williams (2011) as negative and dysfunctional thoughts and feelings about the shape and weight of one's own body, is alarmingly pervasive in U.S society today. A national survey conducted by Thomas Cash (1997) found that dissatisfaction has consistently increased for both men and women compared to reports from prior decades (Cash, Winstead, & Janda, 1986), and has continued to increase such that dissatisfaction is considered "normative" in U.S society (Tantleff-Dunn, Barnes, & Larose, 2011). BID has been found to be negatively correlated with self-esteem and social functioning (Furnham & Calnan, 1998), and has also been regarded as a key risk factor for disorders such as anorexia (Garner & Garfinkel, 1980) and bulimia (Brannan & Petrie, 2011). Traditionally, BID has been viewed by researchers and the public as a primarily female affliction. The negative behavioral consequences of body image dissatisfaction, such as disordered eating, have certainly been more visible in the female population; women are three times more likely to be diagnosed with an eating disorder, for example (Blashill, 2011). Because of unrealistic thin ideals for women perpetuated by the media, dieting and starvation can become a strategy for women to strive towards thinness, which can lead to malnutrition and even death.

Early studies that attempt to compare body image across genders indicated that men were considerably more satisfied with their appearance compared to women (Rozin & Fallon, 1985; Zellner, Harner, & Adler, 1989; Feingold & Mazzella, 1998). However, more recent studies with males have found that body esteem, defined as the attitudinal and emotional aspect of body image, significantly decreases following media exposure, indicating that the connection between the media and BID is an issue for both men and women (Leit, Pope, & Gray, 2002; Arbour & Ginis, 2006; Farquhar & Wasylkiw, 2007). A possible explanation for this trend is that earlier studies utilized body image assessment measures that were designed for women and were therefore inappropriate to use with male populations (Cafri & Thompson, 2004). The development of male-specific measurements, such as the Male Body Attitudes Scale (Tylka, Bergeron, & Schwartz, 2005), has increased the accuracy of male body image research. Another reason for the increase in male BID may be due to sociocultural developments-specifically, the growing attention to idealized male bodies in the popular media. In contrast to the modern female body ideal, which emphasizes thinness, muscularity dominates the media depiction of male body ideals. Men are more likely to desire to gain weight and increase their muscularity to attain a mesomorphic physique (defined muscularity and a V-shaped body) (Pingatore, Spring & Garfield, 1997). This mesomorphic ideal has become more visible over time, which may account for the apparent increase in male BID (Pope, Olivardia, Gruber, & Borowiecki, 1999). A meta-analysis conducted by Blond (2008) of 15 studies examining the effect of exposure to media images of idealized bodies on male BID found that 30 out of 35 effect sizes were significant, indicating an increase in BID. These studies included magazine images and television commercials.

Surprisingly, there has been little research conducted on the effects of video games on male body dissatisfaction, despite the fact that most households own at least one video game console, and the majority of video game consumers are male (Entertainment Software Association, 2012). Considering that video games are one of the most popular forms of media today, with sales surpassing that of movies (Martins, Williams, Ratan, & Harrison, 2011), it is important that the psychological effects of these games be studied as systematically as other forms of media.

Only one published study, to date, specifically examines the relationship between video game play and male body satisfaction (Bartlett & Harris, 2008). In this study, 51 male participants were recruited to play the video game *WWF Wrestlemania 2000*, which was chosen because of its emphasis on muscular male bodies. It was predicted that exposure to muscular male

characters, in the form of the player's opponent, would lead to decreased body esteem. The researchers attempted to create a more immersive experience for the player by instructing them to make their own character as similar to them as possible. The participants played the video game for 15 minutes, either with a muscular opponent, or an obese opponent that acted as a control. The participants completed body image measures before and after playing the video game, including the Body Esteem Scale and the Swansea Muscularity Attitudes Scale. It was found that men with the muscular opponent reported decreased body esteem, as well as decreased positive attitudes towards muscularity.

With the results of this research in mind, the aim of the current study was to investigate the specific effect that playing a vivid, technologically advanced video game with visibly muscular characters would have on male body image. Because the majority of video game players are male, and considering that the body image concerns for men and women are strikingly different, only male subjects were recruited for this study. It was hypothesized that men who play a highly realistic game with a muscular character will report lower levels of body esteem compared to those who play with a character of an average build.

METHOD

Participants
Participants were twenty-six undergraduate students from Bridgewater State University in Massachusetts. The mean age was 19.88, *SD* = 1.48; mean weight was 179.04 lb., *SD* = 37.00; and mean height was 69.68 inches, *SD* = 3.75. Average BMI was 25.85, *SD* = 4.62 – BMIs above 25 are considered overweight. The participants were overwhelmingly Caucasian (88.5%), with a small representation of Hispanic (3.8%). Religious composition was 57.7% Christian, 34.6% Agnostic, and 3.8% Buddhist. Participants also responded to questions regarding their habits of video game play. The men in this sample reported playing an average of 1.5 hours of video games a day, and 7.3 hours a week.

Measures
The Body Image States Scale (BISS; Cash et al., 2002). A 6-item scale designed to capture state body image: a person's thoughts and feelings about their body at a particular moment in time. The BISS has been used extensively in experiments measuring the effect of media viewing on body image, because it is effective in evaluating body image changes as the result of stimulus exposure. All items are statements that begin with "*Right now I feel*" and each addresses a different component of body image, such as weight concerns and physical attractiveness.

The Sociocultural Attitudes Towards Appearance Scale-3 (SATAQ-3; Thompson, van den Berg, Roehrig, Guarda & Heinberg, 2004). This scale was developed and is widely used as a measure of an individual's attention towards media ideals and messages, and the degree to which they internalize these messages. Participants are asked to respond to various statements such as *I've felt pressure from TV or magazines to lose weight* by indicating how much they agree with the statement on a 5-point Likert type scale, where 1= *Definitely disagree* and 5= *Definitely agree.* The scale is divided into four subscales (Information, Pressures, Internalization-General and Internalization-Athlete).

Male Body Image Measurements The following three scales were used to assess body image and muscularity concerns.

The Male Body Attitudes Scale (MBAS; Tylka, Bergeron & Schwartz, 2005). The MBAS measures male body image on an attitudinal dimension; that is, how men feel about their bodies. Participants indicate their agreement from *1=Never* to *6= Always* in response to statements such as *I think I have so little muscle on my body.* There are three subscales in the MBAS that examine specific dimensions of male body image: Muscularity, Low Body Fat, and Height Concerns.

The Swansea Muscularity Attitudes Questionnaire (SMAQ; Edwards & Launder, 2000). The SMAQ is designed to evaluate how men perceive muscularity in terms of positives and negatives, and also the behavioral consequences of these patterns of thinking, such as working out to become more muscular. Participants are asked to indicate their level of agreement with statements such as *I feel more masculine when I am more muscular* on a 7-point Likert-type scale ranging from *1=Definitely* to *7=Definitely Not.* A two factor solution has been observed for this scale: the Positive Attributes of Muscularity and the Drive for Muscularity.

The Drive for Muscularity Scale (DMS; McCreary & Sasse, 2000). The DMS is a similar measure to the SMAQ, but it was designed to measure muscularity concerns for both sexes. Nine out of the 15 original questions were used for this study. Participants respond on a 6-point scale from *1=Always* to *6=Never*.

The MBSRQ-Self Classified Weight Subscale (MBSRQ-SCW; Cash, 2000). This is a 2-item subscale of the Multidimensional Body Self-Relations Questionniare that gauges a person's self-perception of their own weight, and how they believe others perceive their weight. Responses range from *1= very underweight* to *5= very overweight.*

The Body Esteem Scale (BES; Franzoi and Herzog, 1986). This scale is designed to measure body esteem specifically. There are three subscales: Physical Attractiveness, Physical Condition, and Upper Body Strength. The BES asks participants to rate various body parts according to how positively or negatively they feel about each one (*1= Have strong negative feelings, 5= Have strong positive feelings*). Each subscale is summed to obtain scores, with higher scores indicating more positive body image.

Procedure
Permission to conduct the experiment was granted by the Institutional Review Board at Bridgewater State University. Participants were recruited via a sign-up board located in the Psychology Department. Randomization to a condition occurred in the sign up process, as each time-slot had been randomly assigned to a condition beforehand. Potential participants were offered course credit for participation in research, but they were also given alternative ways to earn the credit if they did not wish to participate.

Pre-test and Manipulation
The experiment took place in a small laboratory. There were no more than two participants in the room during a session, along with either a male or female lab assistant who was present at all times. Each participant was given an informed consent document and their signature indicated their willingness to participate in the experiment. The purpose of the study was kept vague to control for demand effects; participants were told that they were involved in an experiment that would "examine how playing video games affects the thinking patterns of college students." Participants were then administered a pre-test questionnaire that included demographics questions, the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) , and questions about the participants' video game habits. The Rosenberg Self-Esteem Scale, a measure of general self-esteem, was included to verify that randomization had resulted in group equivalency.

Following the pre-test, participants received a brief written explanation of the video game they would be playing, as well as instructions on how to control their character. The game that was selected for the experiment was *The Elder Scrolls V: Skyrim*, a role-playing computer game developed by Bethesda Softworks in 2011. This recently released game had received critical acclaim for its detailed, realistic virtual technology (VanOrd, 2011). The game was also chosen for the customization features of the avatars, which could be manipulated to be extremely muscular or diminutive.
To increase the structural reliability of the experimental design, characters were customized beforehand so that all players would begin at the same point in the game with one of the same two

characters. Because the participants were also randomized beforehand, the screen was set up in one of two possible games which served as the conditions of the experiment.

In the first condition, or the control group (n=12), the game was played with a character of average size and shape. Muscularity was manipulated beforehand by the researcher using a sliding scale in the character customization screen. The average avatar's muscularity was almost exactly in the middle of the scale, so that the character did not appear significantly bulky, nor obviously skinny or sickly. The intent was to create an avatar that was similar in size and shape to the average American male. No other feature of the avatar was manipulated (face, skin color, hair, etc.). For the second condition (n=13), muscularity was manipulated to the highest point on the scale, allowing the avatar to appear significantly more muscular than the average male. All other features remained the same as the control group. Participants played the game, uninterrupted, for 45 minutes.

Post-Test
After exiting the game, participants completed the post-test questionnaires. These questionnaires consisted of the RSES, several questions about how the participant felt about the game, and the seven body image scales listed above. Participants were then debriefed and provided with a class credit slip for their participation.

Results
To test for group equivalence before the manipulation, a one-way multivariate analysis of variance (MANOVA) was run on the demographic variables and scores on the Rosenberg Self Esteem Scale (RSES). The results of this test indicate that there were no significant group differences before the experiment began for any of the tested variables, Wilk's Lambda = .95, $F(5, 19)$ =.20, p = .96.

In order to test the main hypothesis, two separate one-way analyses of variance (ANOVAs) were conducted to determine if there was an effect of playing a video game with a more muscular character as opposed to a more average body type, one with the BISS and the other with the BES. These two measures were chosen for the main analyses because they specifically measured state body image and would most accurately reflect any changes that were a direct result of the independent variable. An alpha level of .05 was used for both tests. Men in the muscular condition reported significantly less favorable body image as measured by the BES (M= 97.38, SD= 17.59) than men in the control condition (M=115.33, SD= 14.32), $F(1, 23)$ = 7.75, p = .01, $\eta2$ = .25. The 95% confidence interval had limits from 88.14 to 106.63, and the observed

power for the effect of playing with a muscular avatar was .760. These results indicate that playing this video game with a muscular avatar significantly decreased body image within our sample. The results of the BISS ANOVA, while not statistically significant, were in the expected direction: Muscular Group (M =5.41, SD =.64), Average Group (M = 5.94, SD = .78), $F(1, 23)$ = 3.53, p = .073.

In addition to these main tests, t-tests were run on all scales and subscales used in the post-test to look for any emerging patterns in the ways men might specifically be affected by the video game. The groups differed in the expected direction on all scales, with men in the muscular condition displaying higher muscularity and weight concerns, and lower body esteem, although only the differences for the Pressures subscale of the SATAQ, $t(23)$ = 2.09, p = .05, and the Positive Attributes of Muscularity subscale (PAM) of the SMAQ, $t(23)$ = 2.26, p = .03, were statistically significant. The differences between these scales lend further support to the hypothesis.

Discussion
It was expected that participants who played a highly realistic, immersive video game with a muscular character would display lower body esteem and higher muscularity concerns than participants who played the game with a character who had a more average body size and shape. The results of the current study provided some support for the hypothesis. Two scales were used to measure the main effect of state body image on the participants post-video game play: the Body Image States Scale (BISS) and the Body Esteem Scale (BES). The BES, for which a significant difference in body esteem was observed between groups, was the scale previously used by Bartlett and Harris (2008), lending further support to both the hypothesis and the reliability of the scale as a measure of state body image. The BISS, on the other hand, did not yield significant results, although the F-value was quite close to being significant.

All body image measures used in this experiment differed from one another between groups in the expected direction, with the muscular group displaying less body esteem and more muscularity concerns. Out of the seven scales used, the Pressures subscale of the SATAQ, and the Positive Attributes of Muscularity subscale of the SMAQ were significant. The significance of these particular subscales makes sense when compared to the findings of other research that has been conducted on male body image and media exposure. Research has shown that muscularity concerns play a large role in the construct of male body image, and may have a substantial influence on male body esteem (Tylka, 2011).The fact that the Pressures subscale is significantly higher for the muscular players suggests that being exposed to muscularity put more

pressure on men to look similar to these idealized characters. The Positive Attributes of Muscularity subscale, on the other hand, indicates that the exposure to a muscular character in video game play makes players more likely to see muscularity as positive, ideal, and attractive to the opposite sex. These patterns of thinking could conceivably develop into lowered body esteem if a man starts to compare his own body with an idealized video game character and finds himself lacking (Leit, Gray, & Pope Jr., 2002).

Only one other known study (Bartlett & Harris, 2008) has investigated the relationship between video games and male body image. Both this previous study and the current investigation observed a significant decrease in male body esteem after exposure to muscular body ideals in video games. This similar result was observed in both studies despite significant differences in experimental design. In the Bartlett and Harris study, the independent variable was the muscularity of the player's opponent, while the current study used the muscularity of the actual avatar that the player controlled. This difference may offer an explanation for a difference in results between the two studies. Bartlett and Harris, using the SMAQ, observed a decrease in positive attitudes towards muscularity, while we observed an increase. It is possible that perceiving muscularity in terms of an opponent could have led players to see this construct in a more negative light. A muscular avatar, essentially a virtual extension of oneself, would therefore have the opposite effect.

This study included several important limitations. First, the sample size was quite small, with only 25 participants. This limits the generalizability of the results, especially since the sample was a fairly homogenous group of Caucasian college-aged men. This study should be replicated with a larger and more diverse pool of participants. Second, unique features of the game selected for this study may have also served to limit reliability. Because of what is known as an "open-world" style of gameplay, participants were not guided by the video game towards one particular goal or set of actions, meaning that the actual experience of the game could have been significantly different from one participant to the next. Therefore, additional influences, such as the degree of success or failure that the participant experienced while playing the game, may have affected the self-esteem or arousal of the participant and influenced the results of the experiment, although it is important to note that the initial muscularity of the character in the game did not give the participant an unfair chance of success in the game, as strength and skill were accumulated only by the experience gained by playing the game.

These findings indicate a need for further research into the relationship between male body image and video games. If playing video games does have a negative effect on the body esteem of men, as our results indicate, it is quite likely that high rates of participation in this form of media may lead to higher rates of body dissatisfaction in the male population. It is a fact that the ideal male body has become more visible and muscular over the past few decades, which some argue is leading to a culture of muscularity in men that parallels the culture of thinness that has led to low self-esteem and disordered eating for so many women (Agliata & Tantleff-Dunn, 2004). Multiple studies have observed the psychological consequence of media exposure in males: with increased exposure, body esteem drops and muscularity concerns rise (Bartlett et al., 2005; Cafri et al., 2002). These consequences have the potential to cause body image and muscle dissatisfaction, which has been linked to poor psychological functioning. As a result, depression, low self-esteem, and even serious disorders such as muscle dysmorphia may arise. Future research should include longitudinal studies that explore behavioral effects of video game play on male body image, as well as studies that include specific measures of realism and game play success as potential covariates. The results of this preliminary investigation are intriguing, and they will hopefully serve to inspire greater scientific investigation of the relationship between video games and male body image.

References

Agliata, D., & Tantleff-Dunn, S. (2004). The impact of media exposure on male's body image. *Journal of Social and Clinical Psychology*, *23*(1), 7-22.

Arbour, K. P., & Martin Ginis, K. A. (2006). Effects of exposure to muscular and hypermuscular media images on young men's muscularity dissatisfaction and body dissatisfaction. *Body Image*, *3*, 153-161.

Bartlett, C. P., & Harris, R. (2008). The impact of body emphasizing video games on body image concerns in men and women. *Sex Roles*, *59*, 586-601.

Bartlett, C., Harris, R., Smith, S., & Bonds-Raacke, J. (2005). Action figures and men. *Sex Roles*, *53*(11), 877-886.

Blashill, A. J. (2011). Gender roles, eating pathology, and body dissatisfaction in men: A meta- analysis. *Body Image*, *8*, 1-11.

Blond, A. (2008). Impacts of exposure to images of ideal bodies on male body dissatisfaction: A review. *Body Image*, *5*, 244-250.

Brannan, M. E., & Petrie, T. A. (2011). Psychological well-being and the body dissatisfaction– bulimic symptomatology relationship: An examination of moderators. *Eating Behaviors*, *12*, 233-241.

Cafri, G., & Thompson, J. K. (2004). Measuring male body image: A review of the current methodology. *Psychology of Men and Masculinity*, *5*(1), 18-29.

Cafri, G., Strauss, J., & Thompson, J. K. (2002). Male body image: Satisfaction and its relationship to well-being using the Somatomorphic Matrix. *International Journal of Men's Health*, *1*(2), 215-231.

Cash, T. F. (2000). MBSRQ User's Manual (third revision). *The Multidimensional Body-Self Relations Questionnaire.*

Cash, T. F., Fleming, E. C., Alindogan, J., Steadman, L., & Whitehead, A. (2002). Beyond body image as a trait: The development and validation of the Body Image States Scale. *Eating Disorders*, *10*, 103-113.

Crowther, J. H., Williams, N. M. (2011). Body image and bulimia nervosa. In T. F. Cash & L. Smolak (Eds.), *Body Image: A Handbook of Science, Practice, & Prevention* (2nd ed., pp. 154-169). New York, NY: Guilford Press.

Edward, S., & Launder, C. (2000). Investigating muscularity concerns in male body image: Development of the Swansea Muscularity Attitudes Questionnaire. *International Journal of Eating Disorders*, *28*(1), 120-124.

Entertainment Software Association. (2012). *Industry Facts.* Retrieved from http://www.theesa.com/facts/index.asp

Fallon, A. E., & Rozin, P. (85). Sex differences in perceptions of desirable body shape. *Journal of Abnormal Psychology*, *94*(1), 102-105.

Farquhar, J. C., & Wasylkiw, L. (2007). Media images of men: Trends and consequences of body conceptualization. *Psychology of Men and Masculinity*, *8*(3), 145-160.

Feingold, A., & Mazzella, R. (1998). Gender differences in body image are increasing. *Psychological Science*, *9*(3), 190-195.

Franzoi, S. L., & Herzog, M. E. (1986). The Body Esteem Scale: A convergent and discriminant validity study. *Journal of Personality Assessment*, *50*(1), 24-31.

Furnham, A., & Calnan, A. (1998). Eating disturbance, self-esteem, reasons for exercising and body weight dissatisfaction in adolescent males. *European Eating Disorders Review*, *6*, 58-72.

Garner, D. M., & Garfinkel, P. E. (1980). Socio-cultural factors in the development of anorexia nervosa. *Psychological Medicine*, *10*, 647-656.

Hobza, C. L., Walker, K. E., Yakushko, O., & Peugh, J. L. (2007). What about men? Social comparison and the effects of media images on body and self-esteem. *Psychology of Men and Masculinity*, *8*(3), 161-172.

Leit, R. A., Gray, J. J., & Pope Jr., H. G. (2002). The media's representation of the ideal male body: A cause for muscle dysmorphia? *International Journal of Eating Disorders*, *31*(3), 334-338.

Martins, N., Williams, D. C., Ratan, R. A., & Harrison, K. (2011). Virtual muscularity: A content analysis of male video game characters. *Body Image*, *8*, 43-51.

McCreary, D. R., & Sasse, D. K. (2000). An exploration of the drive for muscularity in adolescent boys and girls. *Journal of American College Health*, *48*, 297-304.

Menzel, J. E., Krawczyk, R., & Thompson, J. K. (2011). Attitudinal assessment of body imagefor adolescents and adults. In T. F. Cash & L. Smolak (Eds.), *Body Image: A Handbook of Science, Practice, & Prevention* (2nd ed., pp. 154-169). New York, NY: Guilford Press.

Morgan, M., & Shanahan, J. (2010). The state of cultivation. *Journal of Broadcasting & Electronic Media*, *54*(2), 337-355.

Pingitore, R., Spring, B., & Garfield, D. (1997). Gender differences in body satisfaction. *Obesity Research*, *5*(5), 402-409.

Pope Jr., H. G., Olivardia, R., Gruber, A., & Borwiecki, J. (1999). Evolving ideals of male body image as seen through action toys. *International Journal of Eating Disorders*, *26*, 65-72.

Rodin, J., Silberstein, L., & Striegel-Moore, R. (1984). Women and weight: A normative discontent. *Nebraska Symposium on Motivation*, *32*, 267-307.

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Tantleff-Dunn, S., Barnes, R. D., & Larose, J. (2011). It's not just a "Woman Thing": The current state of normative discontent.*Eating Disorders: The Journal of Treatment and Prevention*, *19*(5), 392-402.

Thompson, J. K., van den Berg, P., Roehrig, M., Guarda, A. S., & Heinberg, L. J. (2004). The Sociocultural Attitudes Towards Appearance Scale-3 (SATAQ-3): Development and validation. *International Journal of Eating Disorders*, *35*(3), 293-304.

Tylka, T. L. (2011). Refinement of the tripartite influence model for men: Dual body image pathways to body change behaviors. *Body Image*, *8*(3), 199-207.

Tylka, T. L., Bergeron, D., & Schwartz, J. P. (2005). Development and psychometric evaluation of the Male Body Attitudes Scale (MBAS). *Body Image*, *2*, 161-175.

VanOrd, K. (2011). The Elder Scrolls V: Skyrim review. In *GameSpot.* Retrieved from http://www.gamespot.com/the-elder-scrolls-v-skyrim/reviews/the-elder-scrolls-v-skyrim-review-6344618/

Zellner, D. A., Harner, D. E., & Adler, R. A. (1989). Effects of eating abnormalities and gender on perceptions of desirable body shape. *Journal of Abnormal Psychology*, *98*(1), 93-96.