The Media’s Representation of the Ideal Male Body: A Cause for Muscle Dysmorphia?

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Abstract: Objective: This study sought to examine the effects of media images on men’s attitudes toward their body appearance. Method: A group of college men viewed advertisements showing muscular men, whereas a control group viewed neutral advertisements. Immediately thereafter, participants performed a computerized test of body image perception while unaware of the hypotheses being tested in the study. Results: The students exposed to the muscular images showed a significantly greater discrepancy between their own perceived muscularity and the level of muscularity that they ideally wanted to have. Discussion: These findings suggest that media images, even in a brief presentation, can affect men’s views of their bodies. © 2002 by Wiley Periodicals, Inc. Int J Eat Disord 31: 334–338, 2002; DOI 10.1002/eat.10019

Key words: media images men’s attitudes; body image perception

INTRODUCTION

The relationship of male body image to media influences has become an area of increasing scientific interest. Studies demonstrating the increasing muscularity of male action toys (Pope, Olivardia, Gruber, & Borowiecki, 1999) and Playgirl centerfold men (Leit, Pope, & Gray, 2001) have suggested that modern society praises an increasingly muscular male body ideal (Pope, Phillips, & Olivardia, 2000). These trends parallel a rise in anabolic-androgenic steroid use among men (Pope, Phillips, et al., 2000) and an apparently increasing prevalence of muscle dysmorphia, a disorder in which men become obsessed with muscularity (Olivardia, Pope, & Hudson, 2000). These observations suggest that the cultural ideal of hypermesomorphy may be just as dangerous to men as is the anorexic ideal to women. This ideal may be especially dangerous because some male images in the media may not even be attainable without drugs such as anabolic steroids (Kouri, Pope, Katz, & Oliva, 1995; Pope, Phillips, et al., 2000).

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We sought to examine the direct effects of the media's portrayal of the ideal male physique. In this study, men were exposed either to advertisements featuring muscular men taken from popular magazines or to neutral images. We hypothesized that the men exposed to images of hypermesomorphic males would display lower levels of body satisfaction than would men who were not exposed to these images. The study used methodology similar to that of a previous study that had shown the adverse effects of the media on women's body satisfaction (Klodner, 1997).

METHOD

Participants

We recruited 82 undergraduate men from a private university in the middle-Atlantic states to participate in the experiment. Written informed consent was obtained prior to the experiment, which was approved by the Human Subjects Committee of the university. The mean age of the participants was 19.8 years ($SD = 2.8$). The majority of students (70%) were in their first or second year of school. Most were White (78%) and citizens of the United States (91%).

Stimulus Materials

The stimulus materials were similar to those used by Henderson-King and Henderson-King (1997), except that they were geared toward men. In each condition, participants viewed 30 slides of advertisements from popular magazines and clothing catalogs. In the control condition, the advertisements contained either no human images or human images that did not focus on the body. In the experimental condition, 10 neutral slides were included with 20 slides featuring ideal images of the male body. Images were selected by the principal investigator and then rated by 10 college-aged men on whether or not the experimental images would be perceived by most people as being muscular and attractive, while not being extremely sexually provocative. The raters evaluated each advertisement on a 7-point Likert scale ranging from 1 (not at all muscular/attractive/sexually provocative) to 7 (extremely muscular/attractive/sexually provocative). The raters made three separate ratings for each advertisement to judge musculature, attractiveness, and degree of sexual provocation. Three judges rated whether or not the neutral images would be perceived as non-body focused. The images that received the highest scores for attractiveness and musculature were used for the muscular advertisements whereas the images that received the lowest scores were used for the neutral advertisements. The advertisements that received a mean score of 5 or greater on the sexually provocative dimension were eliminated from consideration.

Measure

Participants performed a computerized test of body image perception, the Somatomorphic Matrix (Pope, Gruber, et al., 2000). This instrument is a computer program that allows male participants to visually adjust pictures of men to make them more or less muscular and more or less fat at the same time. It consists of a $10 \times 10$ matrix of line drawings of men that vary in percent of body fat and fat-free mass index (FFMI), an index
of muscularity (Kouri et al., 1995). The body fat percentages increase in increments of 4%, beginning at 4% body fat and ending at 40% body fat. The FFMI is range from 16.5 to 30.0 kg/m², increasing in increments of 1.5 kg/m². Participants are asked to select the figure that they believe best represents their current body shape, their ideal body shape, the average body shape of men their age, and the body shape most desired by women.

Procedure

Experimental sessions were conducted in groups. Like the Henderson-King and Henderson-King study (1997), the research was introduced as a study about the factors that make print advertisements memorable. Participants were told that they would view a series of 30 slides that they would later be asked to remember. Before viewing the slides, participants completed a demographic questionnaire and a questionnaire on their magazine reading habits. After viewing the slides, the participants were assessed using the Somatomorphic Matrix. Participants were told that they were using the Somatomorphic Matrix to assist another psychology study and to prevent them from rehearsing the slides that they had seen. After completing the computer assessment, they were asked to recall as many of the advertisements as they could remember. Following completion of the tasks, the participants were debriefed fully. We predicted that the experimental group would display greater body dissatisfaction than the control group, as reflected by greater discrepancies between current perceived and ideal body shapes.

RESULTS

Each man’s current body shape was compared with three of his perceptions on the Somatomorphic Matrix: ideal body shape, his estimate of the average body shape for a man of his age, and the body shape he judged most desired by women. Within each of these comparisons, a discrepancy analysis using t tests was performed on the difference in percent of body fat and the difference in musculature, as assessed by the FFMI. Table 1 shows the mean scores for men’s FFMI and fat discrepancies. After

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<th>Table 1. Body shape discrepancies</th>
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<td>Muscularity (expressed as FFMI kg/m²)</td>
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<td>Body fat (expressed as %)</td>
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Note: FFMI = fat-free mass index.

aPositive values mean that the subject chose images more muscular than his own perception of his own body.
bPositive values mean that the subject chose images less fat than his perception of his own body.
p < .10. "p < .05.
viewing the images, the experimental group displayed a significantly greater discrepancy between current and ideal FFMI than did the control group, \( t (80) = 2.54, p < .05 \), and between current FFMI and their estimate of the average man's FFMI, \( t (80) = 1.98, p = .05 \). However, we found no significant differences between groups on the discrepancy between current FFMI and their estimate of the FFMI most desired by women, \( t (80) = .43, p = \text{ns} \). No significant differences were found between the groups on the body fat measures.

**DISCUSSION**

This study suggests that exposure to muscular male figures in advertisements produces measurable body dissatisfaction in men, as reflected in an increased difference between the level of muscularity that they perceive themselves to have and the level they would ideally like. It is important to note that this dissatisfaction was primarily with respect to musculature, rather than body fat, a finding consistent with previous evidence that musculature is more important than body fat in men's body satisfaction (Pope, Gruber, et al., 2000).

Interestingly, the manipulation did not affect men's perceptions of women's preferences for male bodies. This finding may be attributable to the nature of the advertisements. All of the experimental advertisements depicted muscular men in isolation; they were not shown to be interacting with women. Moreover, the selected pictures had been rated as not sexually provocative. Thus, these images may not have triggered thoughts of being sexually attractive to women. Instead, they may have caused the men to think primarily about their own ideals and other men's ideals.

Several limitations of this study should be noted. First, it must be recognized that the brief presentation of slides in the single experimental session cannot mimic the lifelong effect of thousands of media exposures among men in contemporary society. Thus, the real life effect of the media on body esteem in men may be far greater than that found under the relatively limited conditions of the present investigation. Second, the sample studied in this research consisted of college-aged men. It is not certain that our findings would generalize to men of all ages. For example, older men may be less susceptible to body image disturbance because they base their self-worth on features other than appearance (Lynch & Zellner, 1999). It would be important to examine how body image concerns in general, and the media's impact in particular, might change over the course of a man's life.

**REFERENCES**


