

PROPOSAL NARRATIVE

Muscles and Media: How Video Games Affect Male Self-Perception and Body Image

1. Proposal Narrative

A. Abstract

Previous research shows that media has an influence on men's and women's self-perception and body image. Men's body dissatisfaction has been increasing in the past decades; however, there is limited research available on the factors that might increase dissatisfaction. Video games, a common type of media exposure for men, influence how men perceive themselves. The purpose of this study is to investigate how the muscularity of characters in video games and the drive for muscularity and masculinity affect self-perception and body dissatisfaction in men. Fifty male participants will play either a video game with a muscular character or a video game with a more realistic character. They will be assessed using a number of questionnaires that measure their drive for muscularity, drive for masculinity, body dissatisfaction and self-perceptions. Using the computer program, The Somatomorphic Matrix, participants will have the ability to adjust the muscularity and body fat percentages of men in line drawings. Men will be using this Matrix to answer questions about their body and the ideal body. This information will provide data to calculate the discrepancies between the perceptions. It is predicted that males who play the video games with the muscular character will be more likely to experience larger body-image distortion compared to the men who play a neutral video game. If our hypotheses are supported we will contribute to the growing research on video games and how they affect men's self-perception.

B. Background/Statement of the Problem/Significance of the Project

Media plays a large role in how women perceive their bodies (Tiggeman & McGill, 2004). The media emphasis on being thin is particularly associated with women and related to body dissatisfaction (Tiggeman & McGill, 2004). The effects of media on men's body perception are relatively underexplored despite the fact that male body dissatisfaction has increased. In 1972, 25% of men reported being dissatisfied with their bodies as compared to 67% in 1997 (Pope, Gruber, Mangweth, Bureau, deCol, Jouvent, & Hudson, 2000).

The majority of media images of men portray men as fit, extremely muscular, and with unrealistically low body fat percentages (Nikkelen, Anshutz, Ha, & Engels, 2012). As with women, the image portrayed as "ideal" is either not obtainable or obtainable only through extreme measures (Pope, Olivardia, Gruber, & Borowiecki, 1999). Evidence from several studies shows that men who read fitness magazines tend to rate themselves lower on body esteem and their drive for muscularity increases (Labre, 2005). McCreary & Sasse (2000) utilized the term "the drive for muscularity" to represent the thoughts and behaviors of an individual preoccupied with the desire to increase muscle mass. At the extreme, some men have indicated a desire to gain as much as 30 pounds of muscle mass (Pope et al., 2000). The determination for muscularity in men is psychologically comparable to the desire for women to be thin (Baird & Grieve, 2006). Women develop an obsession over the desire to be thin and this behavior can be seen with strict diets and workout schedules. Men can exhibit similar obsessive and restrictive behaviors with the intent to gain muscle mass (Harvey & Robinson, 2003). Eating disorders in men are similar to what women experience; the difference consists of how they perceive their bodies.

Several aspects of men's socialization can affect men's self-perception. Conformity to stereotypical masculine norms generates an unwritten rule about what it means to be a man (Steinfeldt, Steinfeldt, Halterman, Gomory, & Gilchrist, 2011). The rules for being a man are communicated to them through seeing other men behave and via how they are presented in the society. The media that portrays muscular men can lead to lower levels of self-esteem and higher levels of body dissatisfaction (Nikkelen, et al., 2012). Nikkelen et al. found that paying close attention to specific areas of idealized male bodies, especially the abdomen, could lead to higher body dissatisfaction. Another aspect of self-perception that might explain men's body image is social comparison. Festinger's (1954) proposed that individuals compare themselves to others and in return evaluate themselves. One source of social comparison for men is the ideal images of men in the media. In fact, Baird & Grieve (2006) conducted a study on college male participants who were asked to look at sixteen advertisements, some including male models, others only including the product. They found that men have higher body dissatisfaction and are negatively affected after viewing male models

in advertisements. As indicated earlier men's primary body dissatisfaction issues are associated with social norms and masculine norms (Steinfeldt et al., 2011).

The combination of social expectations and media influences can be detrimental to men's perceptions and psychological health. The pressures toward trying to achieve this ideal body have caused an increase in prevalence rates in body image disorders. The most common disorder, muscle dysmorphia, is a disorder where individuals see themselves much smaller than reality and work to become more muscular (Maida & Armstrong, 2005). Characteristics of this disorder include: obsession with muscularity, restricted eating, and the use of anabolic steroids. Muscle dysmorphia and the characteristics of muscle dysmorphia are associated with body dissatisfaction and distorted self-perceptions (Maida & Armstrong, 2005). Although muscle dysmorphia is an extreme outcome of a desire of muscularity, its existence points to a need for psychologists to be aware of factors that influence men's body self perception.

Media & Male Ideals

Media is a very general term referring to a large number of forms of mass communication. When referencing media images associated with both male and female body dissatisfaction, advertising receives the largest amount of attention. Advertising is often implicated in the creation of body ideals due to the level of attention and manipulation associated with creating an ideal. However, ideal body images are communicated through a variety of forms. When examining images that are associated with increasing male muscularity, print advertisements, television, video games and even toys have all shown a trend toward larger muscles (Pope et al., 1999). Furthermore, there is a significant amount of research available on how print media affects males. However, there is a small amount of data available on how other types of media influence men. Pope et al (1999) described a large increase in the muscularity of action figures. Many of the toys depict physiques of advanced bodybuilders and some illustrate levels of muscularity that is unattainable for humans. As an example, below is comparison of GI Joe across several decades (1964 to 1994) as shown in the Pope et al article leading up to the modern-day action figure.

In today's society, action figures are not only seen on shelves, role models of action-related males are frequently portrayed in video games. Adult men engage in up to 18 hours of video game play per week (Hotz, 2012). Previous research has shown that video games increases participants' sense of presence and involvement (Ivory & Kalyanaraman, 2007). The sense of presence describes the individuals' feelings of the representations of the content and characters in the video games as real. Therefore, individuals form close connections with the characters in the video games. Consequently, an analysis of the influence of video games on body perception is important as video games represent both the ideal body image and a close sense of connection. Barlett and Harris (2008) conducted a study looking at the effects of muscular versus non-muscular characters in video games on males. They found that playing a video game that portrayed a muscular character produced a significant lower body esteem and body image than playing a non-idealized character. However, Bartlett and Harris did not specifically measure muscularity in relation to the accuracy of self-perception.

C. Objectives

The current study will investigate how video games affect men's accuracy of self-perception, body dissatisfaction, and drive for muscularity and drive for masculinity. It is hypothesized that the group of men that plays a video game with a muscular character will be more likely to experience larger body-image distortion compared to the group of men that play a neutral video game. If our hypotheses are supported we will contribute to the growing research on video games and how they affect men's self-perception.

D. Research Methods

Participants

The participants of this study will be about 50 male undergraduate students from the University of Wisconsin- La Crosse. They will be recruited from PSY 100 and will receive extra credit for their participation. This introductory psychology course is required for multiple majors on campus, therefore it does not only include psychology majors. The average age range is expected to be 18-21 and will include predominantly Caucasian-Americans.

Materials and Procedures

Once students sign up for the experiment, participants will be asked to meet in a computer lab on campus for 45 minutes. They will be randomly assigned to two groups when they arrive for the study. After the introduction to the study, the informed consent will be obtained. Instructions on how to play the video game will be given to the participants. Both groups will be playing the same video game for 20 minutes; however, group one will be controlling a very muscular male character, while group two will be controlling a more realistic sized character. The researchers prior to video game play will create the characters for both conditions. After the participants play the video game, they will be asked to fill out a series of questionnaires. Basic demographic information about age and race as well as frequency of video game play will be assessed using a questionnaire. Measures of body satisfaction, the drive for muscularity and the drive for masculinity will be chosen from the current literature on the topics, possibilities include: The Body Assessment (BA; Lorenzen et al., 2004), the Drive for Muscularity Scale (DMS; McCreary & Sasse, 2000) and the Conformity to Masculine Norms Inventory-46 (CMNI-46; Parent & Moradi, 2009). To test the accuracy of self-perception the Somatomorphic Matrix (Pope, Gruber, et al. 2000) computer program will be used. Participants will have the ability to adjust the muscularity and body fat percentages of men in line drawings. They will be asked to answer the following questions: (1) What do you think you look like? (2) Where would you ideally like to be? and (3) Where do you think most women prefer males to be? After the questionnaires, a male research assistant will be hired to confidentially document actual body measurements for each participant such as height and weight to calculate Body Mass Index, and body fat percentage as measured by the Taylor Handheld Body Fat Analyzer. These measurements will be used to calculate where the participants actually are on the Somatomorphic Matrix (Pope, Gruber, et al., 2000) (see Appendix for modified Matrix screenshot). This information will be used to find discrepancies in where the participants think they are, where they actually are, and where they would ideally like to be. They will then be debriefed about the purpose of the study and will be given contact information for any future questions or concerns.

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Appendix

E. Final Products and Dissemination

If awarded grant funding, we will present at the UW-L Student Research & Creativity Day and submit to the Journal of Undergraduate Research. In addition, this coming November, we plan to submit a paper to the Psi Chi portion of the Midwestern Psychological Association. If accepted, it will be presented in May of the following year.

F. Budget justification

- A male research assistant will get paid \$7.50 an hour and the study will take about an hour per participant. The total for this would be \$375. A male research assistant is needed to accurately measure participants and to make male participants feel more comfortable.
- Taylor Body Fat Analyzer and Taylor Scale: These tools are needed to measure participants body fat and weight. The total for these two will be \$75 including shipping.
- Cost to print poster to present our results: \$35
- Cost to print papers for assessments, demographic questionnaire, consent forms and debriefing, about 20 pages per participant. $50 \times 20 = 1000 \times .06 = \60
- Access to the Somatomorphic Matrix assessment will cost \$100.

2. Letter of Support

March 22, 2013

To whom it may concern:

I am honored to be able to write this strong letter of support for Bugs Bunny and Daffy Duck's Honors research project on the potential role of exposure to video games in college men's body dissatisfaction as it relates to muscularity. This topic is timely given that several special topics journals on men's body image have been published within the past 2-3 years, and scales measuring drive for muscularity are in the process of being normed and validated.

I have several colleagues at other institutions leading the field of men's issues in the areas of drive for muscularity and body dissatisfaction. There is a growing body of literature suggesting that men are influenced by media images much in the same way as the robust findings on women's body image. Additionally, men's time spent playing first-person style video games has increased significantly. While much research has been done on the role of gaming on violence and aggression, little is known as to how this may influence men's ideas about ideal body image.

Bugs and Daffy designed an experimental study to learn more about how exposure to muscularity in video games affects players' self image. They will expose one group of participants to 20 minutes of game playing with a character whose body size is average in muscularity and body fat. The second group will play the same game using a character with exaggerated muscularity and low body fat, a composition consistent with characters in many video games. Participants will complete measures on masculine ideology, use a computer program that allows them to design the self vs. ideal body composition, and participants will be measured for actual body composition. To my knowledge, no research has been done looking at these specific independent and dependent variables, and I suspect findings will be well received in men's studies.

I've had the pleasure of having both Bugs and Daffy in several classes. They are both dedicated students and critical thinkers. We have had several brainstorming sessions in the design phase and they never fail to come up with creative solutions to problems. Their project is completely of their design and their proposal shows a good understanding of and grounding in the available literature. I am happy to serve as their advisor and I will be available to help them with each step of the project including design, data collection, data analysis and the final write-up. This research lends itself well to publication in professional, peer-reviewed journals on men's mental health, and the students are interested in pursuing this route as well presenting at professional conferences.

Sincerely,

Mickey Mouse

3. Transcripts

4. Previously Funded Research Information (if applicable)

N/A