

EFFECTS OF OBJECTIFIED PORTRAYALS OF  
WOMEN: COMPARING VIDEO GAMES,  
MAGAZINES, AND FILM

By

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EFFECTS OF OBJECTIFIED PORTRAYALS OF  
WOMEN: COMPARING VIDEO GAMES,  
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## CHAPTER I

### INTRODUCTION

Video games are becoming more popular among women. In fact, women now comprise 40% of all gamers according to a recent survey (Entertainment Software Association, 2008). In response to this emerging population of female gamers, developers created a game designed to have a strong female role model for women – Tomb Raider. The main character, Lara Croft, was a voluptuous female archeologist in search of ancient treasure. However, a casual examination of the Lara Croft character reveals that she may not have been designed with women’s interests in mind. Her rail thin body and over-sized breasts seem to appeal more to the established base of teenage male gamers rather than to the newly emerging population of female gamers. This discrepancy could lead one to the conclusion that Lara’s introduction to the world may have been due to ulterior motives.

While the increased popularity of video games has garnered attention from social scientists, the primary focus has examined how the violence in video games leads to aggression. An important aspect however that has been overlooked in video game research is the sexist and objectifying portrayal of women commonly seen in these games and how the effects of this portrayal differ from the effects of other popular media. It is unknown how these portrayals may affect the female gamers that spend countless hours interacting with these sexist images. The purpose of the present study is to assess if the

sexist imagery seen in video games decreases female players' self-esteem and increases their self-objectification more than sexist representation in magazines and film.

## CHAPTER II

### REVIEW OF LITERATURE

#### *Research on the Effects of Video Games*

Previous video game research has primarily focused on how the violence present in many video games influences individuals' aggressive behavior and cognitions. This emphasis on aggression and media violence is not a modern phenomenon; eighty studies were published on this topic before 1975. The results of these early studies coincide with what has been found in more recent research - exposure to media violence can increase aggressive behavior and cognitions (Bushman & Anderson, 2001).

Research has established a relationship between video games and aggressive behaviors. For example, correlational research shows that children who report playing violent video games also report engaging in aggressive behavior more frequently (Gentile, Lynch, Linder, & Walsh, 2004). Laboratory experiments also demonstrate this effect. In one of the first experimental studies examining effects of video games on aggressive behavior, participants played a violent or non-violent video game and were later given an opportunity to deliver noise blasts to a competitor in a reaction time based task. Those who played the violent video game delivered longer noise blasts than those who played the non-violent game (Anderson & Dill 2000). Similarly, Bushman and Anderson (2002) found that after playing a violent video game participants were more likely to complete an ambiguous story stem by saying the main character would behave aggressively, think



aggressive thoughts, and feel more angry, suggesting that violent video games also increase aggressive cognitions. Finally, people who play violent video games are slower at providing help to a victim (Anderson & Bushman, 2001) and are more likely to display desensitization to both media violence and real-life violence (Carnegey, Anderson, & Bushman, 2007). Thus, research has demonstrated that the violent content of video games increases people's aggressive tendencies; however, few studies have examined another common feature of modern video games – their potentially sexist content.

### *Sexist Content in Video Games*

Although a few studies have examined the topic of sexist video games, the majority of these have simply conducted content analyses to determine how prevalent sexist imagery is in video games. A decade ago, Dietz (1998) found that video games contained few portrayals of women and when portrayed, they were usually one of three types: Damsel in distress, beautiful woman encouraging the active male character, or an evil villain standing in the way of an objective. Unfortunately, more recent studies show that women continue to be underrepresented and overly sexualized in video games. For example, more recent reviews found that only 10% of main characters were female (Dill, Gentile, Richter, & Dill, 2005) and that when women are depicted in video games, they are typically portrayed as scantily clad, large breasted sex objects that are often treated as rewards for the male characters (Beasley & Collins-Standley, 2002).

This sexist representation of women is not only present in the games themselves but can also be seen in the packaging and advertising of video games. Burgess, Stermer, and Burgess (2007) conducted a content analysis of video game covers and found that women were rarely present at all. When women were depicted on a cover, it was usually

as a secondary character (71%) that was physically objectified (e.g., exaggerated bust, revealing/vulgar clothing, suggestive poses). A recent examination of video game magazines revealed similar results, with game advertisements in these magazines portraying women as highly sexualized, passive, and secondary (Dill & Thill, 2007).

Given that sexist images are so prevalent in video games, it is surprising that few researchers have investigated how this imagery influences people who play these games. One recent study however that did investigate this topic found that men who were shown photos of sexy female video game characters were more tolerant of a sexual harassment case than men who viewed photos of US senators and congresspersons (Dill, Brown, & Collins, 2008). This suggests that sexist video games may increase men's tolerance for negative behaviors against women. More support comes in the form of research demonstrating that men rate a victim of rape as less appropriate after playing a game as an objectified female character.

The prevalence of sexist imagery in video games is even more concerning given that women are now playing video games as often as men. Women report playing video games an average of 7.4 hours per week, compared to men who report playing 7.6 hours per week (ESA, 2008). Furthermore, women are often exposed to video games even when they are not playing because women often report watching their male friends play (Stermer, Burgess, & Burgess, 2007).

Given the increase in female gamers, it is important to determine what effects these sexist video games have on the young women who play them. To date, only one study has examined how sexist video games influence women's responses (Barlett & Harris, in press). In this repeated measures design, female participants completed several

measures of body perceptions and then played a video game as an objectified female character for 15 minutes. Afterwards, participants again completed the body perception measures. The results showed that playing the video game lowered the female participants' body esteem; however, it did not impact their body satisfaction or body shape image.

In sum, several surveys have shown that women are typically represented in video games as sex objects. However, few studies have actually examined how such imagery affects the women who play these games. Although research on this issue in regards to video games is scarce, a great deal of research has been conducted on how women respond when exposed to other forms of sexist media.

#### *Sexist Content in Other Forms of Media*

*Magazines.* Like video games, magazines are a very popular form of media among young men and women. In fact, one study reported that that people aged 8-18 read magazines an average of fourteen minutes per day (Roberts, Foehr, & Rideout, 2005). Magazines are also similar to video games in that they often depict women in a sexualized way. For example, a recent study found that half of all magazine advertisements feature a sexually objectified woman (Stankiewicz & Rosselli, 2008).

Exposure to such magazine images has been shown to negatively impact women's self-perceptions. For example, women exposed to pictures of fashion models from magazines report higher concern regarding their weight (Posavac, Posavac, & Posavac, 1998). Additionally, when female participants are shown magazine images of thin, idealized women, they show greater body dissatisfaction (Haliwell & Dittmar, 2004; Harper & Tiggemann, 2008) and higher levels of self-objectification, and weight-related

appearance anxiety. Women who view magazines with advertisements and layouts of ideal representations of women report lower body esteem (Henderson-King, Henderson-King, Hoffman, 2001). Finally, a recent meta-analysis of magazines, television, and film concluded that there are robust effects that indicate media exposure has a moderate effect on investment in appearance and body dissatisfaction (Grabe, Ward, & Hyde, 2008). The effect is moderated by type of media. Specifically, magazines and television have a moderate effect.

*Television and film.* Another form of media that is highly popular is television. According to The Nielsen Company (2008), people watch over four hours of television every day, making television the most popular form of home entertainment. In fact, 99% of American homes have at least one television, compared to only 38% of homes that have a video game console (ESA, 2008). It is important to note, however, this statistic does not include gamers who use a personal computer for gaming.

Studies examining the sexist content of television are scarce, but what is available tends to agree: the content is having a negative effect. First, it is clear that television shows often involve sexualized images of women. In fact, 2/3 of primetime network programming was found to contain sexual content (Kunkel, Cope, & Biely, 1999). Second, such sexual content is often combined with some form of explicit negative behavior toward women. For example, depictions of sexual harassment (defined to mean sexist comments directed at women, sexual comments regarding women, and sexist body language such as leering) were found to occur in 84% of prime-time programming (Grauerholz & King, 1997).

Studies have shown that the objectifying portrayals of women found in television and film can influence how female viewers perceive themselves. Women who report viewing television with idealized portrayals of women report a stronger endorsement of the use of surgical procedures to reach the unrealistic physical ideal (Harrison, 2003). These women also exhibit a desire for a more idealized body, specifically a thinner frame and larger bust. Frequent viewing of television has been linked to an increase in perceived self-obesity and perceived poorer health (McCreary & Sadava, 1999). Also, watching certain kinds of television programming, such as soap operas or movies, has been associated with an increase in the drive for thinness (Tiggemann & Pickering, 1996). Frequent viewing of sexist content in television shows has been linked to more concern about physical appearance in women (Aubrey, 2006).

The commercials shown on television also tend to have deleterious effects. Women exposed to sexually objectifying television commercials report they are more likely to overestimate the size of their body and display a greater discrepancy between their body image and their actual body size than those exposed to non-sexually objectifying commercials (Lavine, Sweeney, & Wagner, 1999). Furthermore, after viewing commercials featuring ideal images of women, female participants report higher dissatisfaction with their bodies and were more concerned with other people's perceptions of them (Strahan et al., 2008).

#### *How are the Effects of Video Games Different than these Other Forms of Media?*

Although video games share some similarities with other forms of media, there are also distinct differences that may result in unique influences on behavior. First, video games are not simply passive entertainment like television or film. The player is

interacting as a character with other characters and these interactions have their own rewards and consequences.

Second, video games reinforce particular behaviors through the distribution of rewards. Unfortunately, video games often reward players for sexist behaviors. For example, in the *Grand Theft Auto* series, players can get their money back and regain their health if they kill a prostitute after taking advantage of her services. This essentially rewards players for their behaving violently towards women. Many games also feature a token economy whereby a player earns money or some other kind of in-game currency that allows the player to purchase additional content, such as new clothing, additional characters, new environments, or other cosmetic changes to gameplay. The pinnacle of these visual upgrades is often the ability to see the female characters in even less clothing. For example, the most expensive bonus costume in *Dead or Alive Xtreme 2* is a swimsuit for the main character that essentially consists of a few strings and jewels.

Finally, exposure to video games typically involves a longer duration than other forms of media. Most television shows last either 30 minutes or an hour and most movies from 1.5 to 2 hours. The average video game session lasts an hour; however, some games are played as much as 14 hours per week (Nielsen, 2007). Although television and film are the most frequently viewed form of media (Roberts, Foehr, & Rideout, 2005), the fact that video games are interactive, repetitive and contain an inherent reward structure leads some to suspect that they are more influential than other forms of passive entertainment (Anderson & Bushman 2001). The purpose of the present study is to directly compare the effects of sexist video games with the effects of other forms of sexist media to determine if their impact on women's self-perceptions is in fact greater.

### *Present Theory*

For some time the slogan for Sony's Playstation game console was "Live in your world, play in ours." This phrase accurately describes what many people believe about video games - what happens in the virtual world will not affect behaviors and attitudes in the real world. However, research on video game violence suggests that these games do affect real world behaviors. Yet it seems likely that violence is not the only feature of video games that can impact behavior.

The purpose of the present study was to examine how the sexist imagery in video games influences women's self-perceptions compared to sexist images in magazines and film. I predicted women would socially compare themselves to the portrayals of women presented in the media and would then internally evaluate themselves based on how they compare to the ideals presented. The reasoning behind my theory stems from both social comparison theory (Festinger, 1954) and self-objectification theory (Fredrickson & Roberts, 1997).

According to social comparison theory people are driven to look to outside images in order to evaluate their own opinions and abilities. Comparisons are made against a representation and depending on how the comparer is different or alike can have an influence on self-evaluations. One possible outlet for women to find representations to compare to is the media. Studies have examined how the media's influence before, but never in the realm of video games. The current research sought to fill this gap.

Objectification theory states that girls and women internalize observer's perspectives as a view of themselves. Taking this perspective can lead to a variety of negative behaviors (e.g., body shame, anxiety, eating disorders). Exposure to unrealistic

media ideals of women could skew the perspective that women expect themselves to be evaluated against and lead to internalized self-evaluations. Studies have also examined how the media's influence can influence women's self objectification, but just as before, this has never been examined in the realm of video games. The current research sought to fill this gap as well.

Because of the unique features of video games described above, it was predicted that women who play a video game as a stereotypical female character would report lower self-esteem, higher self-objectification, and lower body image than those who were exposed to no media, read a magazine, or watched a film with comparable portrayals of women.



## CHAPTER III

### METHODOLOGY

#### *Participants and Design*

One hundred and three women from Oklahoma State University were recruited using the psychology department participant pool. Their mean age was 19.7 years. They received course credit in exchange for their participation. Participants were randomly assigned to one of four conditions: An objectified female video game group, an objectified female film group, an objectified female magazine group, or a non-exposure control group. The primary dependent variables were self-esteem, self-objectification and body image.

#### *Procedure*

Participants were seated at a cubicle and told that the purpose of the study was to examine people's perceptions of media. Participants were told that they would be exposed to some form of media, asked question about what they saw, and finally receive a series of personality measures.

Participants in the three experimental conditions (video game, magazine or film) first viewed a form of media. Those in the video game condition were given instructions and a key detailing what each button does in the video game prior to playing the games. Participants in the magazine condition were given 15 minutes to read a collection of magazine advertisements. Participants in the film condition were shown a video clip.

Participants in the non-exposure control condition were told that before viewing the media, they will fill out a few questionnaires. Next, all the participants completed a survey packet that included the dependent measures, demographic information, and questions regarding media exposure. To be consistent with the cover story, once participants in the control group completed this packet they were told that there was not enough time for the media portion of the experiment. After completing the survey packet, all participants were fully debriefed and released from the experimental session.

#### *Independent Variable Materials*

*Video games.* Participants in the objectified female video game condition played two different video games. The first game (*Dead or Alive Xtreme 2*) was a racing game featuring women in bikinis racing through a water track on jet skis. This game was played for 7 1/2 minutes. The second game (*Soul Calibur 4*) was a fighting game featuring two scantily clad female characters. This game was played for 7 1/2 minutes. After playing each game a rating sheet assessing the difficulty, offensiveness, and enjoyability of the game was administered. These particular games were selected because of their popularity, with each game ranking in the top ten most popular video games in their respective genres at [www.amazon.com](http://www.amazon.com).

*Magazine articles.* Participants in the objectified magazine condition viewed three 25-page packets consisting of advertisements from several popular magazines, including *Lucky*, *Cosmopolitan*, *Glamour*, and *Marie Claire*. Participants viewed each packet for 5 minutes. After 5 minutes has elapsed a rating sheet assessing the offensiveness and enjoyability of the magazine was administered. These particular magazines were selected because they are the top selling magazines among their target audience.

*Film.* Participants in the objectified video condition viewed three clips taken from different movies. The clip from *From Dusk Till Dawn* featured a bikini-wearing woman dancing for a room of men. The clip from *American Beauty* featured a man having a fantasy as a cheerleading team cheers during half time of basketball game. The clip from *Dead or Alive* featured women playing a volley ball game and then fighting each other. Each clip is approximately 5 minutes long and the total run time was 15 minutes. These particular movies were selected because they were highly popular and they represent a variety of different major film genres (e.g., drama, comedy).

#### *Dependent Variable Materials*

*Self-esteem.* To assess state self-esteem, participants completed the self-relevant affect measure (Leary, Tambor, Terdal, & Downs, 1995). This questionnaire asks people to make self-judgments based on seven positive adjectives (e.g., good, proud) and five negative adjectives (e.g., inadequate, dissatisfied). Responses were made on an eleven-point scale ranging from 1 (*not at all*) to 11 (*very much so*). The measure demonstrated a high level of internal consistency ( $\alpha = .91$ ). Ratings for negative adjectives were reverse-scored so that higher numbers indicated greater self-esteem and then all the items were averaged together to create a composite score.

*Appearance self-esteem.* The six-item subscale of the Heatherton and Polivy (1991) state self-esteem scale was used to measure body satisfaction (e.g., “I am pleased with my appearance right now”). Responses were made on a five-point scale ranging from 1 (*not at all*) to 5 (*extremely*). The measure demonstrated a high level of internal consistency ( $\alpha = .87$ ). Ratings for negative items were reverse-scored so that higher numbers indicated greater appearance self-esteem and then all the items were averaged

together to create a composite score. This measure is often used in appearance esteem research (e.g., Daley et al., 2008; Ip & Jarry, 2008)

*Self-objectification.* The self-objectification scale (Noll & Fredrickson, 1998) assesses aspects of self-objectification by examining people's concern with their appearance without examining their satisfaction with their own body. This scale asks participants to rank six appearance based attributes (e.g., physical attractiveness, weight) and six competence based attributes (e.g., stamina, health) on the impact each attribute has on the participant's self-concept. All twelve attributes are rank ordered from one to twelve. Higher ranking of appearance based attributes indicates higher self objectification. This measure is commonly used in self-objectification research (e.g., Breines, Crocker, & Garcia, 2008; Melbye, Tenenbaum, & Eklund, 2008).

*Body image.* The Body-Image Assessment (Thompson & Gray, 1995) consists of nine drawings of female figures ranging from thin to obese. Participants are asked to indicate the figure that reflects their current body shape and their preferred body shape.

*Contingencies of self-worth.* The contingencies of self-worth scale (Crocker & Wolfe, 2001) contains five items that measure the extent to which participants base their self-worth on appearance (e.g., "When I look attractive, I feel good about myself."). Responses were made on a seven-point scale ranging from 1(*strongly disagree*) to 7(*strongly agree*). The measure demonstrated a high level of internal consistency ( $\alpha = .72$ ). Ratings for negative items were reverse-scored so that higher numbers indicated greater self-worth and then all the items were averaged together to create a composite score.

*Investment in physical appearance.* The Beliefs about Appearance Questionnaire (Cash, Melnyk, & Hrabosky, 2004) contains twenty items that measure the extent to which participants are invested in their physical appearance (e.g. “If I dislike how I look on a given day, it’s hard to feel happy about other things.”). Responses were made on a five-point scale ranging from 1(*strongly disagree*) to 5(*strongly agree*). The measure demonstrated a high level of internal consistency ( $\alpha = .87$ ). Ratings for negative items were reverse-scored so that higher numbers indicated greater investment and then all the items were averaged together to create a composite score.

## CHAPTER IV

### FINDINGS

#### *Preliminary Analyses*

*Descriptives.* Participants reported playing video games an average of .47 hours ( $SD = 1.51$ ) per week and watching video games be played .75 hours per week ( $SD = 1.73$ ). Participants reported reading magazines 1.23 hours ( $SD = 1.56$ ) per week. Participants reported watching television and movies 7.75 hours ( $SD = 5.7$ ) per week.

*Difficulty, enjoyment and offensiveness ratings.* Results showed that participants found *Dead or Alive* ( $M = 6.52, SD = 2.17$ ) to be more difficult than *Soul Calibur 4* ( $M = 4.04, SD = 2.08$ ) games,  $t(52) = 4.28, p < .001$ . However, participants showed no difference in how much they enjoyed the two games,  $t(52) = -.18, p = .86$ , and how offensiveness they perceived the games,  $t(52) = -1.13, p = .27$ .

One-way analyses of variance (ANOVA) revealed no difference in how much participants enjoyed the three magazines,  $F(2,72) = 1.86, p = .16$ , or how offensive the magazines were perceived,  $F(2, 72) = 2.38, p = .10$ .

Results showed no difference in how much participants enjoyed the three film clips,  $F(2,72) = 1.56, p = .22$ . However, there was a significant difference in how offensive the clips were perceived,  $F(2, 72) = 4.76, p = .01$ . Follow up contrasts indicated that the *American Beauty* clip ( $M = 5.36, SD = 2.34$ ) was rated significantly more offensive than the *Dead or Alive* clip ( $M = 3.52, SD = 1.76$ ),  $t(72) = 2.91, p = .005$ . The

*From Dusk Till Dawn* clip ( $M = 5.00$ ,  $SD = 2.50$ ) did not differ from the *American Beauty* clip or *Dead or Alive* clip,  $t(72) = 1.02$ ,  $p = .31$ .

*Enjoyment and offensiveness across the media conditions.* Results showed that participants enjoyed some of the media conditions more than others,  $F(2, 74) = 3.81$ ,  $p = .03$ . Follow up contrasts indicated that the video game condition ( $M = 5.20$ ,  $SD = 1.73$ ) was rated significantly more enjoyable than the film condition ( $M = 3.89$ ,  $SD = 1.56$ )  $t(74) = 2.75$ ,  $p = .007$ . The magazine condition ( $M = 4.67$ ,  $SD = 1.85$ ) did not differ from the video game condition or film condition  $t(74) = .283$ ,  $p = .79$ . Although the conditions differed on enjoyableness, they did not differ on ratings of offensiveness,  $F(2,74) = .39$ ,  $p = .68$ .

#### *Primary Dependent Variables*

Results indicated no differences in state self-esteem  $F(3,97) = .94$ ,  $p = .42$ , or appearance self-esteem,  $F(3,99) = 1.41$ ,  $p = .24$ , across the four conditions. There were also no group differences in self-objectification,  $F(3,98) = .16$ ,  $p = .92$ , contingencies of self-worth,  $F(3,98) = .71$ ,  $p = .55$ , or discrepancy between the preferred and current body size,  $F(3,99) = .18$ ,  $p = .91$ . However, there was a marginally significant difference in investment in physical appearance across the four conditions,  $F(3,98) = 2.32$ ,  $p = .081$ . Follow up contrasts indicate that participants in the film condition ( $M = 3.23$ ,  $SD = .56$ ) reported lower investment than those in the control condition ( $M = 3.63$ ,  $SD = .60$ )  $t(98) = 2.41$ ,  $p = .02$ .

## CHAPTER V

### CONCLUSION

The current study did not support the hypotheses. There were no significant differences in the self-esteem variables across the four experimental conditions. There are several possible reasons for this lack of differences. First, the conditions may have not featured media that the participants identified with and therefore they did not have any change in their self-perceptions. The ostentatious media may have represented an extreme end of how the media portrays women and the participants may have not seen this group as an appropriate comparison group. Festinger (1954) hypothesized that in order for social comparison to be most effective a comparison group would be closer to the group the person comparing is in. Perhaps, the groups conceptualized by the media stimuli are too far removed from the participants own group and the effect was weakened to the point of non-significance. A remedy for this problem would be to conduct pilot testing to ensure the media used in the project is within a range of acceptable comparisons.

Second, the media may have not been engaging enough. Participants may have been bored by the media presentations and therefore did not give the stimuli their full attention. Without attending to the stimuli, it is unlikely the effect would be as strong as it could have been. A remedy for this problem would be to make the media exposure more relevant to the rest of the procedure. Participants might not think the first portion has any bearing on the rest of the project so they are idle during the most important part. Media



engagement questions could be included to measure the amount of investment participants have regarding the media they are exposed to.

Third, the amount of scales administered in the project may have been too many. The effects of exposure to sexually objectifying media are stronger in the short term and the multiple scales administered might have taken longer than the effect lasted. This does not explain why the scales given immediately after the media exposure did not show differences, but this could explain why the later scales had no significant results. This can be rectified by reducing the number of scales to a smaller, more manageable number of key concepts that can keep participants' attention.

Finally, the media were not all rated the same. Participants found the video game condition more enjoyable. This is a clear confound that should be remedied in future studies. Additionally, the components of each condition were not consistently rated (e.g., offensiveness for the film condition and difficulty in the video game condition). Variability between the conditions and the clips/games that make up each condition must be pilot tested to be certain they are equal on as many characteristics as possible.

The consistent effect demonstrated by previous research indicates that objectified portrayals of women do have a negative influence on women's self-perceptions. The current study failed to support this. Shortcomings of the method of the current project are the most obvious reason for the lack of support. Future projects pursuing this topic require pilot testing and method refinement to ensure accurate results are obtained before clear conclusions can be reached.

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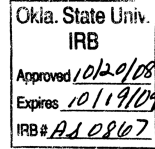
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## APPENDICES



CONSENT FORM

Project Title: Attention to Content of Media

Investigator: Paul Stermer

Purpose: To assess content of media

Procedures: You will interact with a form of media for a period of time and then complete a series of questionnaires (approximately 60 min to complete).

Risks of Participation: Some of the material presented contains adult content – more specifically, adult language, sexual content, and violence. This content does not exceed that which is present in an R-rated movie or a MA rated video game. If you are uncomfortable with any of the material, please inform the experimenter so that you can skip this information.

Benefits: There are no direct benefits.

Confidentiality: Your responses are completely confidential and will in no way be associated with your name. The records of this study will be kept private. Any written results will discuss group findings and will not include information that will identify you. Research records will be stored securely and only researchers and individuals responsible for research oversight will have access to the records. It is possible that the consent process and data collection will be observed by research oversight staff responsible for safeguarding the rights and wellbeing of people who participate in research.

Compensation: You will receive a total of 1 unit of research credit for participating in the study today. Your credit will be awarded through the online SONA system, and your instructor will receive a report by the end of the semester. Courses that participate in the online SONA system allow for comparable credit to be obtained through participation in non-research related activities. Contact your instructor for a list of those activities.

Contacts: If you have any questions about this study, you may contact Dr. Melissa Burkley at 744-7575 (melissa.burkley@okstate.edu). If you have questions about the research and your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-1676 or irb@okstate.edu

Participant Rights: By signing below, you are indicating that your participation today is voluntary, you are free to withdraw at any time, and if you do so, you will not be penalized. You are also free to skip any question or task that you do not feel comfortable completing

Signatures:

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this form has been given to me.

Signature of Researcher Date

I certify that I have personally explained this document before requesting the participant to sign it.

Signature of Researcher Date

1. Age \_\_\_\_\_

2. Year in college:

- Freshman
- Sophomore
- Junior
- Senior
- Other

3. Race

- Caucasian
- African American
- Hispanic/Latino
- Asian American
- Native American
- Other, Please Specify: \_\_\_\_\_

4. Gender

- Male
- Female

6. How many hours per week do you play video games? \_\_\_\_\_

7. How many hours per week do you watch someone else play video games? \_\_\_\_\_

8. How many hours per week do you watch tv/movies? \_\_\_\_\_

9. How many hours per week do you read magazines? \_\_\_\_\_

Instructions: Please answer the following questions by circling the number that best represents your response.

1. To what extent does *good* describe how you are feeling at this moment?  
1 2 3 4 5 6 7 8 9 10 11  
Not at all Very much so
2. To what extent does *inadequate* describe how you are feeling at this moment?  
1 2 3 4 5 6 7 8 9 10 11  
Not at all Very much so
3. To what extent does *proud* describe how you are feeling at this moment?  
1 2 3 4 5 6 7 8 9 10 11  
Not at all Very much so
4. To what extent does *useful* describe how you are feeling at this moment?  
1 2 3 4 5 6 7 8 9 10 11  
Not at all Very much so
5. To what extent does *incompetent* describe how you are feeling at this moment?  
1 2 3 4 5 6 7 8 9 10 11  
Not at all Very much so
6. To what extent does *superior* describe how you are feeling at this moment?  
1 2 3 4 5 6 7 8 9 10 11  
Not at all Very much so
7. To what extent does *smart* describe how you are feeling at this moment?  
1 2 3 4 5 6 7 8 9 10 11  
Not at all Very much so
8. To what extent does *dissatisfied* describe how you are feeling at this moment?  
1 2 3 4 5 6 7 8 9 10 11  
Not at all Very much so
9. To what extent does *confident* describe how you are feeling at this moment?  
1 2 3 4 5 6 7 8 9 10 11  
Not at all Very much so
10. To what extent does *worthless* describe how you are feeling at this moment?  
1 2 3 4 5 6 7 8 9 10 11  
Not at all Very much so
11. To what extent *unimportant* describe how you are feeling at this moment?  
1 2 3 4 5 6 7 8 9 10 11  
Not at all Very much so
12. To what extent does *effective* describe how you are feeling at this moment?  
1 2 3 4 5 6 7 8 9 10 11  
Not at all Very much so

We are interested in how people think about their bodies. The list on the next page contains a variety of attributes that can be used to characterize the human body.

Step 1. We would like you to review all 12 attributes and then take a minute to think about the impact each of these 12 attributes has on your physical self-concept, that is, *your evaluation of your own body*.

Step 2. Considering the entire list again, rank the 12 attributes in ascending order from that which has the greatest impact on your physical self-concept to the least impact on your physical self-concept.

Example: If hair color is the body attribute that has the greatest impact on your physical self-concept, rank this 1. If coordination has the next greatest impact, rank this 2 and so on until you get to the attribute with the least impact on your physical self-concept, which is ranked 12.

Please remember that assigning a rank of 1 indicates that particular body attribute has the greatest impact on your evaluation of your body, while a 12 indicates that attribute has the least impact on your evaluation of your body. **Please do not assign the same rank to two or more attributes.**

**Important:** Note that it does not matter *how* you describe yourself in terms of that attribute. For example, fitness level can have an impact on your physical self-concept regardless of whether you consider yourself to be physically fit, or any level in between. **Please ask questions if these instructions are unclear.**

Rank in ascending order the impact each of these body attributes has on your physical self-concept, that is, *your evaluation of your own body*. Rank these attributes from 1 to 12 beginning with the attribute, which has the greatest impact on your physical self concept (ranked 1) to the attribute with the least impact on your physical self-concept (ranked 12).

\_\_\_\_\_ Physical coordination

\_\_\_\_\_ Health

\_\_\_\_\_ Weight

\_\_\_\_\_ Muscular strength

\_\_\_\_\_ Sex appeal

\_\_\_\_\_ Physical attractiveness

\_\_\_\_\_ Physical energy level

\_\_\_\_\_ Firm or sculpted muscles

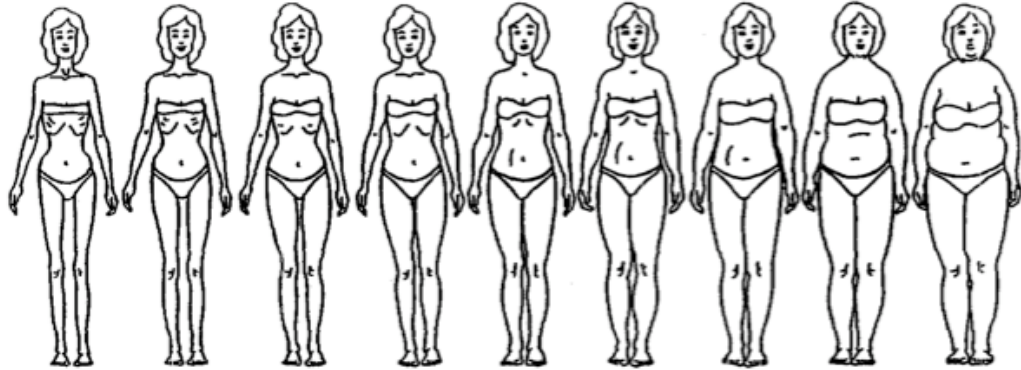
\_\_\_\_\_ Physical fitness level

\_\_\_\_\_ Coloring (e.g., skin tone, eye and hair color)

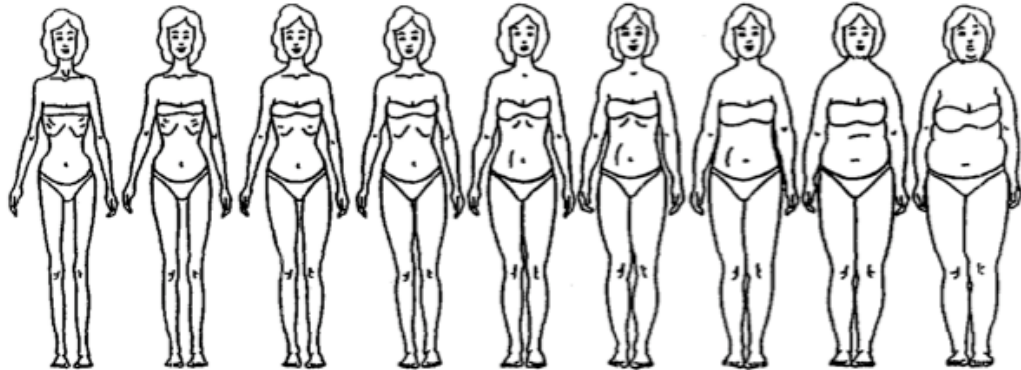
\_\_\_\_\_ Measurements (e.g., chest, waist, hips)

\_\_\_\_\_ Stamina

1. Select the figure that most accurately depicts *your current body size*, as you perceive it to be. Place an X below the figure you choose. You must choose only one figure.



2. Select the figure that most accurately depicts *the body size that you would most prefer*. Place an X below the figure you choose. You must choose only one figure.



Instructions: Please answer the following questions by circling the number that best represents your response.

1. I feel satisfied with the way my body looks right now.  
1                      2                      3                      4                      5  
Not at all          A little bit          Somewhat          Very much          Extremely
  
2. I feel that others respect and admire me.  
1                      2                      3                      4                      5  
Not at all          A little bit          Somewhat          Very much          Extremely
  
3. I am dissatisfied with my weight.  
1                      2                      3                      4                      5  
Not at all          A little bit          Somewhat          Very much          Extremely
  
4. I feel good about myself.  
1                      2                      3                      4                      5  
Not at all          A little bit          Somewhat          Very much          Extremely
  
5. I am pleased with my appearance right now.  
1                      2                      3                      4                      5  
Not at all          A little bit          Somewhat          Very much          Extremely
  
6. I feel unattractive.  
1                      2                      3                      4                      5  
Not at all          A little bit          Somewhat          Very much          Extremely



Please respond to each of the following statements by circling your answer using the scale from "1 = Strongly disagree" to "7 = Strongly agree." If you haven't experienced the situation described in a particular statement, please answer how you think you would feel if that situation occurred.

1. When I think I look attractive I feel good about myself.

|          |   |   |         |   |   |          |
|----------|---|---|---------|---|---|----------|
| 1        | 2 | 3 | 4       | 5 | 6 | 7        |
| Strongly |   |   | Neutral |   |   | Strongly |
| Disagree |   |   |         |   |   | Agree    |

2. My self-esteem is unrelated to how I feel about the way my body looks.

|          |   |   |         |   |   |          |
|----------|---|---|---------|---|---|----------|
| 1        | 2 | 3 | 4       | 5 | 6 | 7        |
| Strongly |   |   | Neutral |   |   | Strongly |
| Disagree |   |   |         |   |   | Agree    |

3. My self-esteem is influenced by how attractive I think my face or facial features are.

|          |   |   |         |   |   |          |
|----------|---|---|---------|---|---|----------|
| 1        | 2 | 3 | 4       | 5 | 6 | 7        |
| Strongly |   |   | Neutral |   |   | Strongly |
| Disagree |   |   |         |   |   | Agree    |

4. My sense of self-worth suffers whenever I think I don't look good.

|          |   |   |         |   |   |          |
|----------|---|---|---------|---|---|----------|
| 1        | 2 | 3 | 4       | 5 | 6 | 7        |
| Strongly |   |   | Neutral |   |   | Strongly |
| Disagree |   |   |         |   |   | Agree    |

5. My self-esteem does not depend on whether or not I feel attractive.

|          |   |   |         |   |   |          |
|----------|---|---|---------|---|---|----------|
| 1        | 2 | 3 | 4       | 5 | 6 | 7        |
| Strongly |   |   | Neutral |   |   | Strongly |
| Disagree |   |   |         |   |   | Agree    |

**The Beliefs about Appearance Questionnaire  
(ASI-R Short Form)**

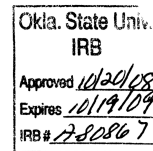
The statements below are beliefs that people may or may not have about their physical appearance and its influence on life. Decide on the extent to which you personally **disagree or agree** with each statement and enter a number from 1 to 5 in the space on the left. There are no right or wrong answers. Just be truthful about your personal beliefs.

|       | 1                            | 2                          | 3  | 4                       | 5                         |   |
|-------|------------------------------|----------------------------|--|-------------------------|---------------------------|---|
|       | <b>Strongly<br/>Disagree</b> | <b>Mostly<br/>Disagree</b> | <b>Neither<br/>Agree<br/>or Disagree</b> | <b>Mostly<br/>Agree</b> | <b>Strongly<br/>Agree</b> |   |
| _____ |                              |                            |  |                         |                           | 1. I spend little time on my physical appearance.                                   |
| _____ |                              |                            |  |                         |                           | 2. When I see good-looking people, I wonder about how my own looks measure up.      |
| _____ |                              |                            |  |                         |                           | 3. I try to be as physically attractive as I can be.                                |
| _____ |                              |                            |  |                         |                           | 4. I have never paid much attention to what I look like.                            |
| _____ |                              |                            |  |                         |                           | 5. I seldom compare my appearance to that of other people I see.                    |
| _____ |                              |                            |  |                         |                           | 6. I often check my appearance in a mirror just to make sure I look okay.           |
| _____ |                              |                            |  |                         |                           | 7. When something makes me feel good or bad about my looks, I tend to dwell on it.  |
| _____ |                              |                            |  |                         |                           | 8. If I like how I look on a given day, it's easy to feel happy about other things. |
| _____ |                              |                            |  |                         |                           | 9. If somebody had a negative reaction to what I look like, it wouldn't bother me.  |
| _____ |                              |                            |  |                         |                           | 10. When it comes to my physical appearance, I have high standards.                 |
| _____ |                              |                            |  |                         |                           | 11. My physical appearance has had little influence on my life.                     |
| _____ |                              |                            |  |                         |                           | 12. Dressing well is not a priority for me.   |

*(continued on the next page)*

|       | 1                 | 2   | 3                         | 4            | 5              |
|-------|-------------------|---|---------------------------|--------------|----------------|
|       | Strongly Disagree | Mostly Disagree   | Neither Agree or Disagree | Mostly Agree | Strongly Agree |
| _____ | 13.               | When I meet people for the first time, I wonder what they think about how I look.               |                           |              |                |
| _____ | 14.               | In my everyday life, lots of things happen that make me think about what I look like.           |                           |              |                |
| _____ | 15.               | If I dislike how I look on a given day, it's hard to feel happy about other things.             |                           |              |                |
| _____ | 16.               | I fantasize about what it would be like to be better looking than I am.                         |                           |              |                |
| _____ | 17.               | Before going out, I make sure that I look as good as I possibly can.                            |                           |              |                |
| _____ | 18.               | What I look like is an important part of who I am.  |                           |              |                |
| _____ | 19.               | By controlling my appearance, I can control many of the social and emotional events in my life. |                           |              |                |
| _____ | 20.               | My appearance is responsible for much of what's happened to me in my life.                      |                           |              |                |

(ASI-R ©Thomas F. Cash, Ph.D., 2003)



### Information Sheet

Thank you for participating in this study. The purpose of this study is to examine a detrimental effect of video games: Sexist portrayals of women. Whenever women are shown in video games, they are typically displayed as overly sexualized characters. In this study, we are examining if playing a video game with such a female character will influence the way that women feel about themselves. We regret deceiving participants regarding the purpose of the study but it was necessary in order to study these responses naturally.

In this study, participants were assigned to one of four conditions. Participants either played a video game, watched a series of film clips, read a magazine or were not exposed to a form of media (control group). Participants then completed questionnaires commonly used to test women's perceptions of themselves and their bodies. Your responses will help us determine if sexist video games influence how women perceive themselves.

Just as we agree to protect your anonymity in this study, we ask that you please not share any information about this study with any fellow students. You may unknowingly tell someone else who is scheduled to participate in this study, and this would ruin our findings.

If you were interested by this research and wish to learn more about it and other related research, please contact Dr. Melissa Burkley (409 NM, [melissa.burkley@okstate.edu](mailto:melissa.burkley@okstate.edu)). She will be happy to discuss this and any related projects with you.

If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-1676 or [irb@okstate.edu](mailto:irb@okstate.edu)

Thank you again for your participation in this study!

**Oklahoma State University Institutional Review Board**

Date: Monday, October 20, 2008  
IRB Application No AS0867  
Proposal Title: Portrayals of Women in Media

Reviewed and Processed as: Expedited

**Status Recommended by Reviewer(s): Approved Protocol Expires: 10/19/2009**

Principal

Investigator(s): ✓

Steven Paul Stermer  
215 North Murray  
Stillwater, OK 74078

Melissa Burkley  
116 North Murray  
Stillwater, OK 74078

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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,



Sheila Kennison, Chair  
Institutional Review Board

VITA

STEVEN PAUL STERMER

Candidate for the Degree of

Master of Science

Thesis: EFFECTS OF OBJECTIFIED PORTRAYALS OF WOMEN: COMPARING  
VIDEO GAMES, MAGAZINES, AND FILM

Major Field: Lifespan Developmental Psychology

Biographical:

Personal Data: Born in Oklahoma City, Oklahoma on January 12, 1983 to  
Steve and Mary Ann Stermer

Education:

Completed the requirements for the Master of Science in Psychology at  
Oklahoma State University, Stillwater, Oklahoma in July, 2009.

Experience: Since attending Oklahoma State University Paul has been a  
member of several psychology committees and has completed multiple  
research projects focused on the effects of stereotypes of women in the  
media.

Professional Memberships:

SPSP, APS, SWPA, PGSA

Name: Steven Paul Stermer

Date of Degree: July, 2009

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: EFFECTS OF OBJECTIFIED PORTRAYALS OF WOMEN:  
COMPARING VIDEO GAMES, MAGAZINES, AND FILM

Pages in Study: 39

Candidate for the Degree of Master of Science

Major Field: Lifespan Developmental Psychology

Scope and Method of Study: Video games are becoming a popular form of entertainment for women, yet the majority of these games contain sexist content. Previous research has examined how other forms of sexist media (e.g., magazines) influence women's responses, but to date, few studies have examined if video games also produce these effects. The purpose of this study was to examine the effects of sexist video games on women's self-perceptions and compare them with the effects of sexist films and magazines.

Findings and Conclusions: Results indicated no differences between groups on all dependent measures. Possible reasons for the lack of differences include lack of engagement, too many questionnaires, and lack of identification with media. Methodological refinements are required to further assess the effects of objectified portrayals of women in the media.

ADVISER'S APPROVAL: Dr. Melissa Burkley

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