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LEVEL UP: EXAMINING THE EFFECTS OF SEXUALIZED VIDEO GAME CHARACTERS

Sarah D. Lethbridge
Southeastern University - Lakeland

LEVEL UP: EXAMINING THE EFFECTS OF SEXUALIZED VIDEO GAME CHARACTERS

by

Sarah Diane Lethbridge

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Dedication

To those who are tired of stereotypical and sexualized representations of women in video games and all media.

Acknowledgement

I thank Jesus Christ for providing me with the passion, strength, and support to pursue this research. All glory to God.

I am grateful for my amazing parents, siblings, and cousins for encouraging me through this process. Thank you for listening to my research, discussing the topic with me, and for pushing me onwards!

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Abstract

Characters in video games, especially female characters, are often designed or depicted to be sexually attractive. These characters are sexualized by exaggerated body proportions, revealing clothing, and behavior. There are a variety of methods by which players could be impacted by these sexualized characters, including the mere exposure effect, Proteus effect, and avatar identification. The increase of video game usage and sales in recent years, specifically among the COVID-19 pandemic, brings a greater need to understand the effects of these video games. Little research currently exists on the topic, and often provides conflicting data. The current study enlisted volunteers to take self-objectification, objectification of others, and sexism inventories after playing a video game condition. The goal of this study was to discover if playing a game with a sexualized female avatar resulted in statistically significant score differences when compared to a nonsexualized and control condition.

KEY WORDS: video games, sexualization, objectification, stereotypes, women in media,

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Introduction

Representation of women and the sexualization of characters in media is not a new topic. There has been an analysis of how women are portrayed in magazines, or the idealized body and attractiveness seen in movies. Video games are unique from these forms of media due to their interactive component. Players do not simply observe sexualized content but are actively engaging with or even as these sexualized characters. Making the conscious choice to dress a character in sexualized dress, or to engage in sexual behaviors with another character is more involved than watching an actor one does not control make those decisions.

Video games have become commonplace, continuing to grow in immersion, accessibility, and usage. Any effects that result from usage would therefore increase and become more widespread. It is important to identify if video games influence players, and how this shifts the perception of the people groups represented therein. Of notable concern is the portrayal of women in video games, who are often shown with overaccentuated sexual bodies and behaviors, with minimal or revealing clothing.

Video games' effect on players' violence has been a cause of debate and controversy. If it is possible that playing violent video games increases aggression in players, is it then possible that playing sexist or sexualized video games affect the attitudes and behaviors of the player as well? This thesis aims to analyze how video games could affect players, and what effects those are. Specifically, the thesis aims at examining how or if players' sexism, self-objectification, and/or objectification of women are affected by video gameplay.

Author's Note

Video games have been a part of my life for as long as I can remember. I grew up on Pokémon on the Nintendo Gameboy and N64 systems, along with education-based video games with handheld Leapfrog consoles. One of the game series my siblings and I played were the LEGO games, children's video games typically based on a movie or comic franchise (such as Star Wars, Indiana Jones and Batman), with an animation style to resemble the LEGO construction toys. What still sticks out to me today about these games is the portrayal of the female characters, as either helpless or just present for romance. These female LEGO characters could only scream loud enough to shatter glass or jump high to swing on poles. Even if the female character did happen to have a rare combat ability, the cinematic animations would portray her as either annoying or attractive to the male protagonist, accompanied by digital hearts. I remember my frustration when I had to play the female characters when my brother and I played these games together, forced to be the weaker and more useless character. This was my socialization on the female identity.

This representation of females did not stop in LEGO games but continued throughout my life as gaming remained a central hobby. More than simply being helpless or annoying, I noticed that female characters were frequently being depicted with tighter clothing, and less of it. One of the first Teen rated games I was allowed to play at the age of twelve was Guild Wars 2, a game that allowed the customization of your character's physical appearance. Many of the games that allow avatar creation give highly specific parameters, most notably the ability to alter a female character's breast size. Another element in these games is character's clothing is visibly altered as one acquires gear with better in-game statistics. Some of these "upgrades" would result in my female characters in highly revealing clothing, which I hated, but had to wear if I wanted my character to succeed in the game and be as powerful as possible. Unless, of course, I wanted to invest more money in the game to alter the appearance of this armor.

Often, the easiest way to avoid these problems was for me to play male characters. I had already been taught that female characters are weak or just "eye candy" for males. By playing the male character, I

could wear the cooler-looking armor, have a more respectable personality, and honestly identify more with the character. I could not relate to the helpless damsel in distress, nor the sexy scantily clad seductress. Video games, my main media consumption throughout my life, did not provide a positive concept of women.

In recent years, I have encountered some games that understand and attempt to rectify this issue. Two notable titles are Horizon: Zero Dawn by Guerilla Games and Control by Remedy Entertainment and 505 Games. These games both have female protagonists without the need for sexualization, and with a complex, more realistic personalities, like those given to male characters. Some games and media that boast female characters have "female" as the defining character trait of these characters, as if "woman" was a personality. Essentially this results in other characters repeatedly harassing and doubting the lead character due to her sex, yet she proves them wrong because she is "strong" in some sense of the word. This female lead has no true personality, no character growth, no flaws, her only goal being to prove she is strong even though she is a woman. I would like to see female characters with the same amount of personality and story, the same level of humanness as invested in the male protagonists and characters.

It was my own frustrating experiences and knowledge of my own damaged perception of women growing up that motivated me to research. Were others affected by video games' portrayals of women as I had been? Are there other effects caused by this widespread sexualization and stereotype? My hope is that my research can spark discussion within the video game industry and contribute to the fair representation of women within this popular media.

Literature Review

Video games have become a popular pastime among youth and adults alike (ESA, 2020). While concerns for the effects of violent content on aggressive behavior in players have been a widely debated topic, fewer research has been devoted to the effects of sexualization. Video game characters are often portrayed with unrealistic proportions and feature to emphasize sexual attractiveness, frequently displayed as female characters' sole source of value (Kondrant, 2015; Matthews et al., 2016). The current literature review will attempt to provide a basis of current knowledge concerning how players are affected by exposure to sexualized video games.

This literature review will provide background on the history of video games and sexualization thereof. It will define sexualization for the purpose of this topic and explore current sexualization in video games. Several social theories will be explained and explored as potential mechanisms by which sexualized video games may affect players. Existing studies on the effects of the sexualization of video games on players will be synthesized to provide a current overview of data.

A Brief History of Video Games

In 1958, physicist William Higinbotham developed an interactive program for a public demonstration hosted by Brookhaven National Laboratory (Chodos, 2008). With simple controls, the system was called *Tennis for Two*, and is often recognized as the first video game (Nyitray, 2019). From here, the complexity and themes of video games grew and diverged. In 1975, Taito Discrete Logic released an arcade game called "Western Gun" in Japan, with two opposing cartoon outlaw characters, possibly the first video game featuring human-like characters. With the introduction of human characters in video games also came stereotypes and tropes, including those about women. Nintendo released a Western arcade game dubbed "Sheriff" in 1979, in which players control a male sheriff character (Voskuil, 2012). In "Sheriff", the goal of the game is to save a woman kidnapped by bandits (Voskuil, 2012). Figure 1 displays a leaflet for the Sheriff arcade game. At the top right, the female character is depicted with an exceedingly tiny

waist, with the word “Help!” above her (Figure 1). When the game is completed, the player avatar is rewarded with an embrace from the female character, a large heart forming above them (Voskuil, 2012).

Figure 1

Leaflet of Nintendo Arcade Game Sheriff

(Voskuil, 2012).

This depiction will be further discussed in the “Sexualization of Video Game Characters” section later on in the paper. Sexualization and stereotypes have been broadcasted and reinforced even in the early years of video games, with themes that continue to run throughout games today.

After their conception, video games spread into homes, from games on personal computers, consoles to connect to the television, and handheld devices (History, 2017). According to the Entertainment Software Associate, (the trade association of video games in the United States), video game usage continues to grow, with 64% of adults in the United States reporting to regular play (ESA, 2020). In March 2020, during the Covid-19 pandemic, video game sales increased by 35%, with producer Microsoft citing a 130% increase in gameplay on their multiplayer servers (Smith, 2020). With video games becoming an increasingly popular pastime, it is important to study and understand the effects of playing and exposure. In the scope of this study, if the sexualization of characters in video games does affect players, these effects will likely be more widespread or pronounced as usage of video games increases.

Sexualization Defined

Before discussing the effects of sexualization, the term must first be defined. In 2007, the American Psychological Association (APA) had a taskforce analyze the sexualization of girls and devised a standard set of criteria for media to be considered sexualized (p. 1). Only one of these criteria needs to be present for something to be considered sexualized (APA, 2007, p. 1). The first marker of sexualization is placing emphasis on a person's sexual attractiveness, whether appearance or behavior, as their source of value (APA, 2007, p. 1). Video games can fall into this category when making physically attractive characters with little skills or usefulness beyond appearance. Princess Peach of the original Mario series falls in this category, with no skills or purpose beyond needed to be saved by Mario. The second given identifier is sexiness displayed a narrowly defined physical attractiveness. Excessive muscularization of male characters, as well as large breasts and small waists for female characters are examples of this in video games. This type of sexualization is visible in the team-based shooter game, *Overwatch*. Female characters like D.Va and Widowmaker have large busts and hips with small waists, features which are clearly accentuated by tight apparel and in-game poses for these characters (Figure 2).

Figure 2

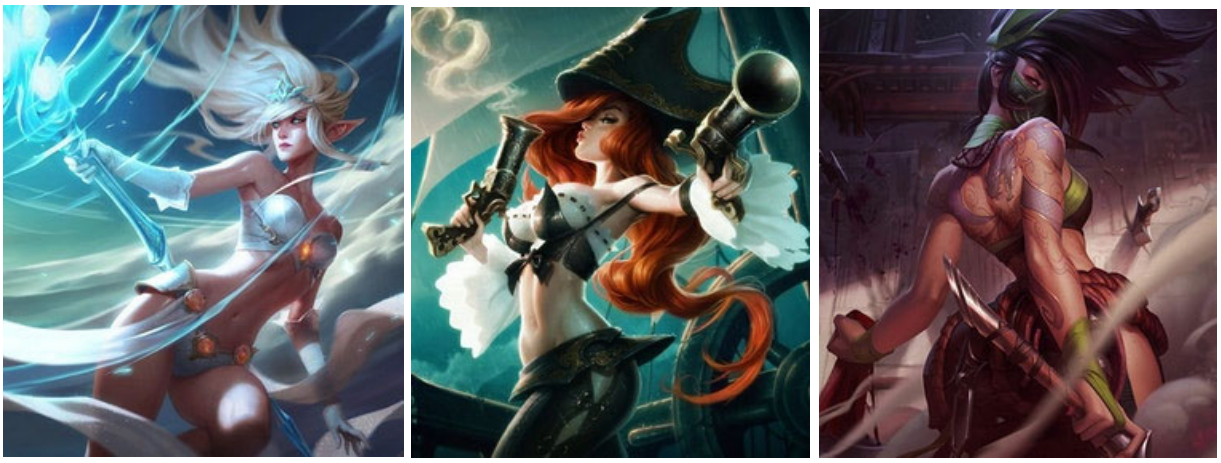
Characters D.Va (left) and Widowmaker (right) from Overwatch

Overwatch. [Video game]. (2016). Irvine, CA: Blizzard Entertainment.

The third indicator of a sexualized character is sexual objectification, reducing people to objects used for pleasure (APA, 2007, p. 1). This would relate to demeaning a character to being a sexual object for the benefit of other characters or the player, without recognizing that they are a person with autonomy. The final criteria given by the APA in this taskforce is the forcing of sexuality onto a person (2007, p. 1). Clothing inappropriate for the given scenario in the game could be indicative of this type of sexualization. Characters in combat instances wearing dresses, bikinis, or inadequate, revealing armor are all examples of this. In the combat game *League of Legends*, developed by Riot Games, many female characters are displayed with minimal or tight clothing (Riot Games, 2020). A few of the many female characters depicted as such in this game, displayed in Figure 3, are wearing revealing clothing comparable to a bikini while in a dangerous combat scenario. *League of Legends,* and thus the sexualized content within, has been rated appropriate for teen audiences by the ESRB (Riot Games, 2020).

Figure 3

Characters Janna (left), Miss Fortune (middle) and Akali (right) from League of Legends



League of Legends. [Video game]. (2009). West Los Angeles, CA: Riot Games.

The skin-tight clothing of the characters in Figure 2 is another example of this indicator of sexualization.

Sexualization of Video Game Characters

With a working definition of sexualization, the current state of video game characters can be analyzed. According to a survey of 234 video game players, over 76% participants believed females were stereotyped in video games (Kondrant, 2015). When asked to specify the reason for their response, 31% responded women were sexually objectified, and 23% reported women were dressed provocatively (Kondrant, 2015). Both responses fit within the working definition of sexualization of video game characters. A limitation of this study is it relies on player memory and opinion. Therefore, it may not be accurate of real depictions of female characters in video games. It does however give a good indication that most gamers (if the study is representative) believe female characters are stereotyped in video games.

Level of sexualization of characters in video games varies as well. In a study to examine player's avatar preferences, researchers categorized characters from the game *League of Legends* based on the

degree of sexualization of the character (Bell, 2017). Categories included nonsexualization, subtle sexualization, overt sexualization, and hypersexualization (Bell, 2017). This leads to the recognition of sexualization as a spectrum, with varying to degrees of sexualization of the characters. While both characters may be sexualized, there may be a difference between a female character with a large bust and hips in a t-shirt and pants versus the character in a bikini. Both would be sexualized, but one would be far more blatant than the other. It is relevant to note, therefore, not just that a character is sexualized in a video game, but the extent of the sexualization.

Another method of sexualization in video games is "hyper idealism". Female idealized characters are slim, with a large bust and/or hips, while male idealized characters are very muscular and fit (Matthews et al., 2016). While not necessarily portrayed as overtly sexual, it does create a constrained definition of physical attractiveness. Thus, these depictions can fall under the second criteria of sexualization as described by the APA (2007, p. 1).

Sexualization of characters in games is not just appearance-based, but also behavioral. Characters treating other characters as objects for sexual pleasure, or characters acting in overtly sexual ways, can meet criteria one and three (APA, 2007, p. 1). An example of this can be found in *God of War 3*, in which a female character trades information for sex with the male protagonist character (Guggisberg, 2020). This depiction portrays this character as existing only for sex and pleasure. An even more extreme example of this is the game *Rape Day*, in which the player-controlled avatar must sexually assault unwilling female characters (Guggisberg, 2019). Women are degraded into objects or prey that must be chased, raping shown as success and the goal of the game. The game *Rape Day* was banned on many platforms, though the developer argued this was only delaying the inevitable normalization of this content (Guggisberg, 2019). Thus games involving examples of highly sexualized content is not only based on character appearance, but also character behavior in the game.

Another element of the depiction of women in video games is stereotypes. The portrayal of the woman in Sheriff is an example of the "damsel in distress" trope, in which the female character is passive and in need of saving (Carpenter, 2013). It is the male characters who are the heroic protagonists, taking action to rescue the helpless lady. This trope continues to propagate through many popular video game series, including the Super Mario series produced by Nintendo (2013). The first Super Mario game was released in 1985, called Super Mario Bros (Nintendo, 2020). The premise of the game is the male protagonist, Mario, is the only one who can save a princess and the kingdom from the evil antagonists (2020). This theme continues through the majority of the Super Mario series. New Super Mario Bros. 2, released in 2012 by Nintendo, focuses on the male protagonists, Mario and Luigi, saving Princess Peach (2020). The description of this game from the official Nintendo site notes "[Mario and Luigi] stare as Princess Peach appears and calls for help. She's been kidnapped again! The heroes set out in pursuit and a new adventure begins!" (2020). This depiction portrays women as helpless, their only role to be saved and fall in love with a male hero, their only source of value is their appearance and status of "princess". The goal in many of the Mario games, rated E for everyone by the ESRB and marketed to children, is to save a princess from an evil villain (2020). It is important to note how widespread and popular the Mario series, and thus this limiting and helpless depiction of women, is. Mario games have made a total of $30 billion dollars as of 2018 and are the second most profitable video game series of all time (Adler, 2020). Specific concern with these games geared towards children is the potential effect these themes may have on younger players.

Why Characters are Sexualized

If video game characters, especially female characters, are depicted in sexualized manners, the next question might be: why? Women have been stereotypically represented in media long before the development of video games. Video games are merely a component of the larger media culture researchers Peter and Valkenburg dub the "sexualized media environment" (2007). Concern that sexualized content was

influencing young girls to portray themselves in objectifying ways first arose in the early 2000s (Duschinsky, 2013). Some researchers argue the portrayal of women as sex objects was an overswing of the sexual revolution and earlier feminist movements (2013). Other researchers contend sexualized women are falsely depicted as liberated, but it is truly just the propagation of derogatory, objectified views of women (2013).

The perpetuation of sexualized and stereotypical depictions of women is influenced by the developers of video games. When the people and work environment creating the games hold sexist or derogatory attitudes, these will certainly arise within the games themselves. This was recently exemplified by events at the major video game company Activision Blizzard, Inc. in the summer of 2021. Activision Blizzard, Inc. produces well-known series, including Call of Duty, World of Warcraft, and Overwatch. In July 2021, the Department of Fair Employment and Housing of California filed a lawsuit against Activision Blizzard on the grounds of sexual harassment and discrimination towards female employees at the company (*Department of Fair Employment and Housing v. Activision Blizzard, Inc.*, 2021). The lawsuit states "male employees proudly come into work hungover, play video games for long periods of time during work while delegating their responsibilities to female employees, engage in banter about their sexual encounters, talk openly about female bodies, and joke about rape" (2021, p. 4). The plaintiffs claim female employees have reported male employees, including executives at the company, groping them even during public events with little to no repercussions (2021, p. 14-15). This workplace culture certainly has bearings on how females are represented in the video games produced by these same people, including the portrayal of characters. Not only that, but it is very toxic and harmful to females working at the company. Female employees who expressed concern to HR faced retaliation, in the form of layoffs, job transfers, and exclusion from work on projects, the complaint continued (2021). The plaintiffs cite a specific event is cited relates to a female employee who suffered previous sexual harassment, specifically a picture of her vagina shared among male co-workers at a party (2021, p. 15). Allegedly, on a later business trip with a male

supervisor, who brought sexual items and had sexual relations with her, the female employee committed suicide (2021, p. 15). A workplace culture that may have contributed to the death of a female employee is a tragedy, and certainly discourages other women from seeking jobs at Activision Blizzard, Inc. in the future. If there is poor female representation in the company workforce, whether due to company discrimination or lack of interest, diverse and more factual input on character representation in-game is less likely. Changing how characters, female in particular, are depicted in video games may start with changing attitudes and beliefs in the workplace.

Theories

How might exposure to sexualized video game characters affect players? There are several theories that contribute to explaining the possible mechanism.

Bandura's Social Learning

Albert Bandura's social learning theories provide an overarching basis, that behavior is learned by watching and copying models (1969). This theory can be used as an explanation for why gamers may enact the behaviors or beliefs they witness in-game. Overexposure to provocatively dressed characters could lead to players wearing the same type of attire. Observing other characters treat female characters as objects could influence gamers to do the same in the real world. In contrast, if characters are portrayed as respectable, aiding other characters and other morally good behavior, video games could be a positive role model for players. It is important to note that this is a theory, as Bandura did not apply his model to video games.

Cognitive Dissonance

A unique aspect of video games not seen in other media is the level of consumer involvement. Players are not just watching behaviors or events but are active participants with an input device to control

some aspect of the game. This is extremely relevant for narrative-based games, in which players make decisions with lasting consequences in the game. One such example is the video game *Detroit: Become Human.* According to Quantic Dream's website, the developer of the game, the players "will face moral dilemmas and decide who lives or dies…every decision [the players] make, no matter how minute, affects the outcome of the story," (Quantic Dream, 2018). In this case, players are engaging in behavior that may promote similar behavior or coinciding beliefs in the real world by the presence of cognitive dissonance. Cognitive dissonance, theorized by Leon Festinger in 1957, results when a person's beliefs and actions do not match, and produce negative feelings and thoughts (1985). To reduce this tension, the person is motivated to either change their beliefs or their behavior (Festinger, 1985). This is applicable in video games, when players engage in behaviors or decisions that may not line up with their personal beliefs. This dissonance will lead players to either reject their actions in-game or begin to rationalize and modify their beliefs to accommodate their virtual actions. Previous studies have shown players develop feelings of guilt when performing morally questionable actions in video games, providing the basis for this effect (Grizzard et al., 2014). More research is needed in this area, but this method could be the mechanism by which later discussed effects are transmitted.

Proteus Effect

The appearance of the game avatar itself can impact player behavior according to the Proteus effect (Yee & Bailenson, 2007). This effect has been studied in the context of the virtual video game environment, in which more attractive avatars receive more help from other players compared to less attractive avatars (Waddell & Ivory, 2015). The Proteus effect relates to change in behavior according to avatar appearance, and thus may not be applicable in alteration of behavior outside of the video game realm.

Normalization and Mere Exposure

If characters are constantly sexualized, the video games are therefore displaying heavily muscled men and scantily dressed women as the norm. By constant exposure to sexualized characters, video games could have a normative effect on players (Matthews et al., 2016). This could be desensitizing players to this imagery and behavior, as well as improving attitudes towards sexualized content by the mere exposure theory (Zajonc, 1968). The mere exposure theory simply postulates that repeated contact with a stimulus leads to increased positive opinion of that stimulus (Zajonc, 1968). These mechanisms could contribute to understanding how exposure to sexualized video games may affect players.

Classical Conditioning

Conditioning could potentially be a mechanism by which sexualized content affects players. Classical conditioning starts by pairing a neutral stimulus, one that would typically not elicit the desired response, to an unconditioned response (Rehman et al., 2020). Once pairing is complete, the previously neutral stimulus results in the desired behavior, now termed the conditioned response (Rehman et al., 2020). Advertisements utilize this learning theory strategically, pairing images of happy people or cheery music with their product (Rehman et al., 2020). How might video games be utilizing this learning theory to affect players? Some games are using sexualized content as rewards for players achieving in-game challenges (Stermer, & Burkley, 2012). The game *Overwatch*, for example, is one of the numerous games that use alternate character appearances/clothing as rewards (2016). Figure 4 depicts two characters in their "default" appearance, compared to one of their reward skins (Figure 5), which can be earned from playing the game or paid for in random "loot" boxes.

Figure 4

Default appearance of characters Ashe and McCree from Overwatch

Overwatch. [Video game]. (2016). Irvine, CA: Blizzard Entertainment.

Figure 5

Alternate appearance of characters Ashe and McCree from Overwatch

Overwatch. [Video game]. (2016). Irvine, CA: Blizzard Entertainment.

Thus, sexualized stimuli are being paired with the sense of achievement and satisfaction from completing a goal in the video game. While it is likely inaccurate to describe sexualized content as a completely neutral stimulus, this direct pairing could still have an impact. Players may have already had a reaction to seeing sexualized characters, a sense of achievement could be recalled upon exposure, with

previous experience of such content as a reward. This, in theory, could normalize or even lead to approval of sexualized content.

Avatar Identification

In conjunction with the previously described theories is the idea of avatar identification. When players associate themselves with the video game character they control, the avatar, it is referred to as avatar identification (Allen & Anderson, 2019; Cristoph et al., 2009). There can be different degrees of identification with the avatar, often related to the similarity of the avatar to the player in terms of appearance, values, and experiences (Allen & Anderson, 2019). Avatar identification goes beyond empathizing with the video game character. For a period of time, the player immerses themselves in the character, experiencing that they *are* the character (Cristoph et al., 2009). This leads to assimilating the character's identity, temporarily accepting the characteristics of the character as the player's own (Cristoph et al., 2009). Higher levels of identification with an avatar have been associated with less empathy for victims of female violence, in a laboratory experiment (Gabbiadini et al., 2016).

Identifying with an avatar is not a guarantee the player will assimilate all of the avatar's choices as their own. When avatars make morally wrong decisions, players decrease their identification with the avatar, and do not feel a significant difference of guilt compared to players who do not identify with their avatar (Allen & Anderson, 2019). In terms of the present topic, identification with a sexualized avatar could mediate feelings of self-objectification, or sexually objectifying others.

Gamers

Who is being affected by exposure to sexualized video game characters? There is at least one gamer, a common term to refer to those who play video games, in 75% of households in America (ESA, 2020). 21% of gamers are under the age of 18, 38% between the ages of 18 and 34, with 35-44 years the average age of a video game player (ESA, 2020). This average age differs from the stereotypical youth playing

video games in the basement (Paaβen et al., 2017). Among those who play video games, 59% identify as male, and 41% identify as female (ESA, 2020). Similar to the data about age, this information is contrary to the preconceived archetype of male gamers (Lopez-Fernandez et al., 2019; Paaβen et al., 2017). It is of relevance to note the controversy between "real" gamers and "casual" players. Distinctions are made between how much time players invest in games, and what types of games are played, to qualify as a "true" gamer (Paaβen et al., 2017). Female players are typically less likely to be considered "real" gamers, due to spending less time playing games, and playing more casual games on average compared to males (ESA, 2020; Lopez-Fernandez et al., 2019; Paaßen et al., 2017). Knowing the definition of gamers allows discussion on how this diverse people group is affected by sexualized video games.

Effects of Exposure to Sexualization

Self-objectification and Body Esteem

Data gathered on the effects of self-objectification and body-esteem seem to conflict. Adolescents reported increased self-objectification and body-related thoughts after playing video games with sexualized characters, (Vandenbosch et al., 2017). This does not appear to be the case for adult gamers, however. An experiment found an increase in positive body esteem in women exposed to hyper-sexualized female video game characters (Matthews et al., 2016). In this case, the female participants seemed to actively reject the sexualized content instead of normalizing it (Matthews et al., 2016). Another found no correlation between exposure to sexualized characters and female participants' body esteem (Lindner et al., 2020). Adult males seem to be unaffected as well, only reporting more negative self-esteem if the male participant also reported a high degree of comparison tendencies (Matthews et al., 2016). These studies suggest only adolescents or males with high social comparison may be affected in terms of body esteem.

Objectification of Others

While data does not indicate a prevalence of self-objectification after exposure to sexualized video games, there is evidence that there could be an increase in the objectification of others. In a study published in 2020, male and female participants viewed images of video game characters, (some male, some female, some sexualized, some not), with participants' eye movement tracked by equipment (Hollett et al., 2020). Both male and female participants had a greater gaze at sexualized female characters' breasts and body opposed to the characters' faces (Hollett et al., 2020). Ignoring the character's face and staring instead at sexual body parts is indicative of viewing the character as an object instead of a person, an activity that was not present when viewing male or non-sexualized characters (Hollett et al., 2020). An earlier study focused on adolescent exposure to sexualized media, finding a significant positive correlation between viewing sexualized content and view of women as sex objects (Peter & Valkenburg, 2007). The authors note the media resulting in the most significant opinion of women as sex objects when adolescents were exposed to audio and visual content on the internet (2007). While Peter and Valkenburg did not specifically study video games, video games do meet their criteria for most influential media. It is unclear if these findings lead to the objectification of women in real life, so further studies must be performed. Furthermore, neither of these studies involved participants playing video games, instead having participants either look at pictures or watch videos. A distinguishing factor of video games is their intractability, something neglected in this research.

Sexism

Studies examining the effects of sexualized video games on sexism are contradictory. In an experiment focused on male participants, those who played a sexualized video game displayed increased hostile sexism but no change in benevolent sexism (LaCroix, Burrows, & Blanton, 2018). Conversely, a survey reported a higher level of benevolent sexism among players of sexualized video games, with no perceived increase in hostile sexism compared to those who did not report playing sexualized video games

(Stermer & Burkley, 2015). Both male and female participants sent more sexist jokes to another participant after exposure to sexualized video game characters, indicating both sexes show an increased level of sexism (Burnay, Bushman, & Larøi, 2019). A survey of adolescents, aged 11 to 19, indicated participants who reported playing sexualized video games displayed higher levels of sexism compared to those who reported less or no play of video games (Bègue et al., 2017). It is important to note this study in particular is a correlational, not causational study, and only had a single question measure for sexism (Bègue et al., 2017). A more recent study surveyed gamers, concluding that those who reported playing more sexualized games were associated with fewer sexist beliefs (Ferguson & Colwell, 2020). Like the previously discussed body esteem, this result seems almost contradictory. It would seem exposure to sexualized content is eliciting opposite reactions against sexism, though the authors warn the effect was small enough that it should not be considered a protective factor (Ferguson & Colwell, 2020). Further study needs to be done in this area to confirm actual effects, with current data harshly conflicting.

Sexual Violence and Empathy

There is mixed data on whether sexualized video games impact sexual violence or aggression in players. A study performed by Stermer and Berkley would seem to indicate an increase in *potential* for sexual violence after playing sexually explicit, violent video games (2012). In this experiment, male college-aged participants were split into two groups, playing as a non-sexualized or sexualized female character (respectively) in the same violent video game (Stermer & Berkley, 2012). Afterward, all participants read a narrative scenario involving a rape case, answered questions responding to this prompt, then completing the Burt 1980 Rape Myth Acceptance Scale (Stermer & Berkley, 2012). Participants who played as the sexualized character displayed more victim blame than the control group (Stermer & Berkley, 2012). A similar study published in 2016 found participants who played a violent sexualized video game displayed more a masculine ideology, associated with less empathy for female violence victims (Gabbiadini

et al., 2016). Later criticism refutes this data, citing no direct experimental effects on empathy were found in the Gabbiadini et al. study, among other experimental procedures (Ferguson & Donnellan, 2017).

In a previous study, Stermer and Berkley also discovered participants who reported playing sexualized video games described a higher likelihood of being aroused with the narrative rape scenario, and higher levels of identification with the rapist in the scenario (2012). This data is correlational research and cannot be utilized to prove causation. However, it seems to display a link between identification with and more acceptance of committing an act of sexual violence. A more recent performed study would seem to refute these claims (Ferguson & Colwell, 2020). In a similar survey-based study, participants responded to several questionnaires about video game usage, aggression and sexism scales, as well as a narrative scenario about rape (Ferguson & Colwell, 2020). This study found no correlation between playing sexualized video games and the amount of empathy towards the rape victim in the scenario (Ferguson & Colwell, 2020).

A critical commentary written by Dr. Marika Guggisberg warns of the consequences of sexually explicit video games (2020). Guggisberg notes that, while much data on the effects of hyper-sexualized video games is lacking, data does exist on the usage of online pornography (2020). Men who use more online pornography have a higher likelihood of supporting rape myths and report positive feelings at the prospect of violence towards women (Durán et al., 2018). Some research warns that acceptance of rape myths and sexual violence had been correlated to the actual perpetration of sexually violent acts (Harper et al., 2019; Yao et al., 2010, as cited in Guggisberg, 2020). While again not definitive proof, this provides the basis by which sexualized video games could result in sexual violence in the real world.

Aggression

In terms of non-sexual aggression, there appear to be no significant short-term effects of playing sexualized video games. In a recent study, female participants were randomly assigned to play a sexualized or non-sexualized video game (Lindner et al., 2020). Among the previously explained questionnaires

concerning body image, participants also completed the ice-water task after 30 minutes of video gameplay (Lindner et al., 2020). The ice-water challenge is a method of measuring aggression, in which the participant determines how long a confederate must hold their hand in an uncomfortable ice bucket, under the assumption this is a test in pain tolerance (Lindner et al., 2020). In terms of aggression, the experiment found nonsignificant effects, with participants from the sexualized video game group displaying less aggression on average than the control (Lindner et al., 2020). It is important to note this study only focused on female participants and aggression towards females. This experiment also only analyzes the short-term effects of playing a sexualized video game (thirty minutes), not a long-term study. One of the benefits of this study is the experimental nature, which can prove cause-and-effect relationships, as opposed to a correlational survey method.

Conclusion

The effects of sexualization of video game characters are still vastly unknown. Limited studies have explored this topic, and those that have provided conflicting results. A variety of social theories have been explored as mechanisms, but many require study to determine if these mediate potential effects. Effects of exposure to sexualized video game characters were compiled from available research, though much work in this area will need to be done to draw conclusive results. One of the main limitations of existing research is simply displaying a sexualized character's image and testing for effects, ignoring the interactivity that makes video games such a unique media form. While avatar identification has shown to not affect increased guilt after playing a video game (Allen & Anderson, 2019), the effect of avatar identification in regard to sexualization in video games remains largely unexplored. Furthermore, it would be beneficial to continue to research some previous studies on the matter, with many contradictory conclusions from the few existing studies in the areas of sexism and aggression. As video games continue to rise in popularity, it may be pertinent to further explore the effects of the prevalent sexualized content.

Methodology

The purpose of this study was to determine if playing a video game with a sexualized female avatar affected participants' self-objectification, objectification of others, or sexism. The hypothesis predicted that participants who played with a sexualized avatar would score higher on these scales than participants playing with the non-sexualized avatar or the control group. The study was experimental in nature, conducted on a small, private, southeastern university campus. Participants were students at this university, gathered on a volunteer basis. The study was promoted by professors in large courses, with participation incentivized by inclusion in a raffle drawing for a fifty-dollar gift card. Copies of the materials used to promote the study are included in Appendix A. To maintain the integrity of collected data, the true purpose of the study (examining the effects of sexualization on objectification) was not revealed to the participants.

Participants were randomly assigned to one of three groups: experimental sexualized, experimental non-sexualized, and non-human avatar game (control group). The experimental groups (sexualized and non-sexualized) were assigned to play the video game *Assassin's Creed Odyssey*. This is an action-adventure game, in which the player can choose to play either a male or female avatar. The character is a mercenary in ancient Greece, with violent combat as a main aspect of the game. This game was chosen due to the ability to alter only the appearance of the female avatar, while keeping all other aspects of the game identical. This video game also utilizes a third-person perspective, which means the avatar is visible to the player while playing (as opposed to first-person perspective). The only difference between the experimental groups was the appearance of the player avatar, as displayed in Figure 5. The control group was assigned to play *Pac-Man*, a game with no humanoid avatars, so bias on sexualization would not occur. *Pac-Man* is an arcade, maze puzzle video game. All games were played on a PlayStation 4 console attached to a television screen, in a private room at the university library.

Figure 6
Sexualized Female Avatar and Nonsexualized Female Avatar used in Experimental Conditions

Sexualized female avatar	Nonsexualized female avatar
	

Assassin's Creed Odyssey. (PlayStation 4) [Video game]. (2018). Quebec: Ubisoft.

Participants volunteered for the study by emailing the researcher, as instructed by promotional materials. Participants then signed up for a time slot on Google calendar to report to the on-campus library. Prior to each participants' arrival, the researcher set up a designated room with the PlayStation 4 console and loaded the video game to the proper starting position (respective to which group participant was assigned). When the participant arrived, the researcher provided the digital consent form. If consent was given, the participant was led to the designated room. The researcher instructed the participant to play the game for thirty minutes, with the goal being to advance as far as possible in the game. A reference sheet for the controls of the game was provided to the participants (included in Appendix B), and participants were informed to ask the researcher if any difficulties arose during play. The researcher informed the participant that there would be a questionnaire to complete after the playtime. The researcher then left the room and began a thirty-minute timer. At the conclusion of the half-hour, the researcher returned to the room with a QR code to give the participant access a digital survey. The

researcher left the room as the participant filled out the survey but was nearby to answer any questions that arose. After the questionnaire was completed, the participant was thanked and dismissed. The researcher then reset the console with a new game save as needed for the next participant.

The post-play questionnaire contained basic demographic questions, video game usage questions, the ambivalent sexism inventory (Glick & Fiske, 1996), and a slightly edited version of the self-objectification and objectification of women questionnaires (Noll & Fredrickson, 1998). The alterations made these scales more relevant and applicable to male participants. Copies of researcher-made questions, the consent form, and the recruitment email format are included in Appendix C, D, and E, respectively.

Results of the experiment were compiled and analyzed using a spreadsheet program. The results are discussed in the next chapter.

Data Analysis

Fourteen university students participated in the study. One participant's responses were removed from the data set, as the participant altered the experimental condition. This left thirteen in the final data set, seven male and six female participants. Participants' ages ranged from 18 to 22 years of age, with an average age of 20. The participant pool was primarily Caucasian, with 78.6% Caucasian, 21.4% African American, and 14.3% Latino or Hispanic. Most participants report little to no video game usage, (28.6% never played video games, 28.6% played once a month). Weekly usage time spent on video games ranged from zero to thirty hours across participants. Most participants (69.2%) reported that they had played a PlayStation 4 console prior to the study, with an average familiarity of 3.23 (on a scale of 1 to 5). All participants in the control group identified the game they played as *Pac-Man,* while only one participant in the experimental conditions fully identified that the experimental game was *Assassin's Creed: Odyssey*.

After answering demographic questions, participants were asked open-ended questions about the appearance of the avatar/player character in the game they played. Participants from the nonsexualized condition responded that the avatar was "beautiful", "strong, fierce, warrior", "strong build", or "female dressed in…ancient Roman armor". Participants in the sexualized group replied that the character had an "athletic build [and] rags for clothing," "pretty but…not exactly practical armor for the arena," "over-sexualized, oily, under-dressed/armored, pretty." One participant in this condition noted, "the appearance of the character is a bit inappropriate. By that [I] mean the avatar is wearing too little and needs to put more clothes on."

The participant who was removed from the data set had been assigned to the sexualized condition but altered the armor and thus the appearance of the character. The participant wrote in an open response about the appearance of the avatar, "she only had undergarments on so I put clothes on her." By doing so, he gave the avatar worse in-game statistics, valuing modesty over power and defense in the game. As the

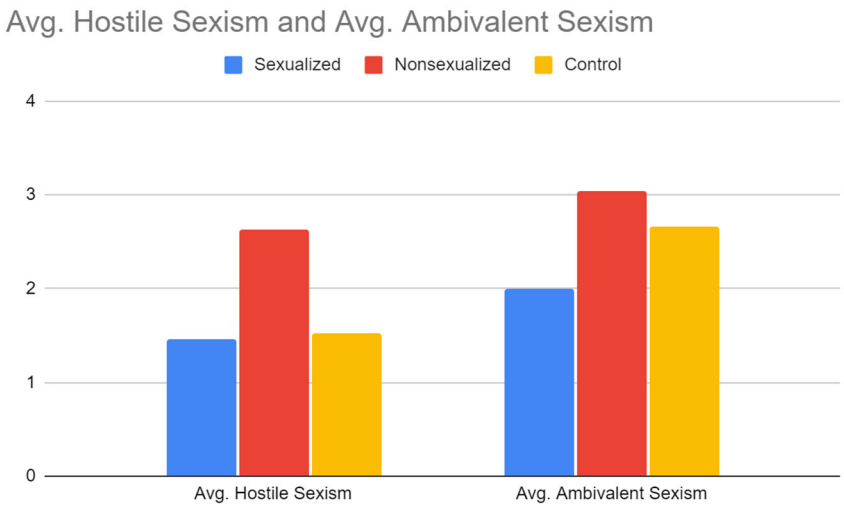
experimental condition had been altered, this participant's scores and data could not be included in the analysis. It does, however, bring a point of further discussion.

Participants also replied to an open response question about the behavior or personality of the avatar/player character in their assigned game. The participants in the nonsexualized condition said the character was "determined", "determined, strong and violent", "fierce, independent, tough", or "strong bold personality…she was going to kill anyone that stood in her way." The sexualized condition described the female avatar as "straight-to-the-point, fighter, patient", "strong, quick, determined," "tough," and "kind in personality…fierce in combat, a little too fierce." In a game based on combat, the descriptions of the character as a fighter, determined, and fierce are uniform throughout responses. The outlier is the single description of the character as "kind" by one of the participants in the sexualized category. No further explanation was given for the reasoning behind this choice of an attribute.

Participants then filled out the ambivalent sexism inventory published by Glick & Fiske in 1996. After proper reverse-scoring of the appropriate items, the data was averaged organized and compiled into Figure 7. Statements in this inventory are rated on a 0 to 5 Likert-type scale, with a score of 5 indicating more sexism, and a score of 0 indicating little to no sexism (1996). Average hostile sexism scores among the sexualized and control groups were similar, a score around 1.5 (Figure 7). Participants in the nonsexualized condition had strikingly higher hostile sexism scores, with an average score of 2.6 (Figure 7). All conditions had higher scores on ambivalent sexism, though the sexualized condition had the lowest average score (2.0), the control group following (2.7), and the nonsexualized group close behind (3.0) (Figure 7). This would seem to indicate participants who played with the nonsexualized female avatar display more sexism than those in the nonsexualized or control group.

Figure 7

Average Hostile Sexism and Average Ambivalent Sexism



Participants then responded to a slightly edited version of the self-objectification and objectification of other questionnaires published by Fredrickson in 1998. In this scale, participants rate a series of values (including sex appeal, health, and strength) from a 0 to 9 scale, with 9 being the most important to them and 0 being the least. Participants were instructed to only use each number once. However, most participants treated these as Likert-type questions, and used numbers/rankings multiple times. Instructions were likely not clear enough in the written form, and revision can be considered prior to future studies. As such, this data cannot be compared to other scores garnered from the objectification inventories published by Fredrickson. Regardless, the data was still usable in this study and provided fascinating insights. The appropriate item scores were reversed, and the results of each condition were averaged. The data from the self-objectification scale and objectification of women scale are displayed in Figure 8 and Figure 9, respectively.

Figure 8

Appearance-based score, Competence-based score, and Self-Objectification Score

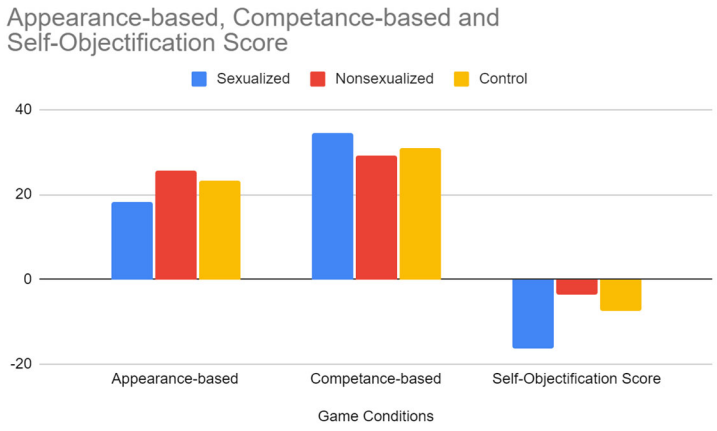
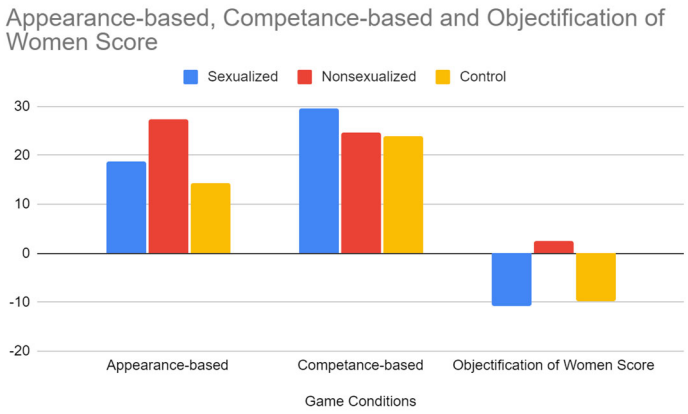


Figure 9

Appearance-based score, Competence-based score, and Objectification of Women Score



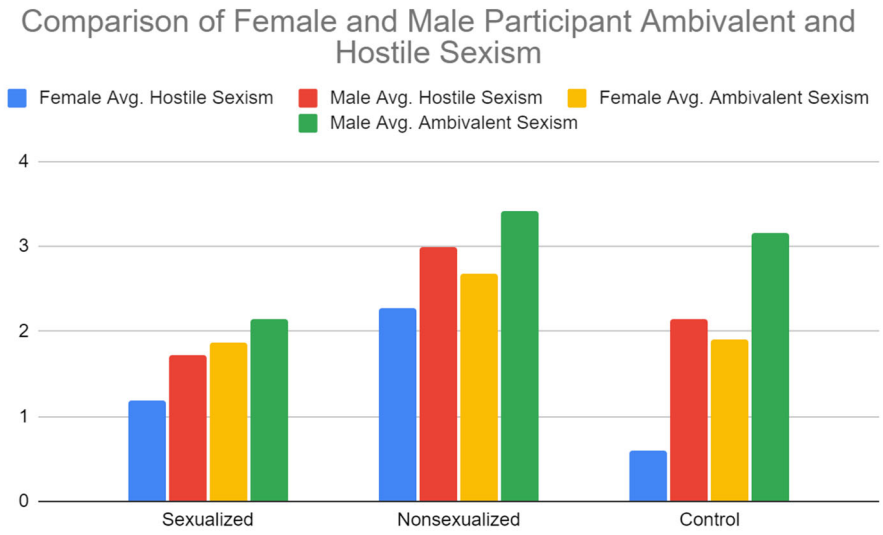
Participants valued competence over appearance for their own worth, leading to a negative self-objectification score across all three conditions (Figure 8). The sexualized condition had the lowest average self-objectification score at -16.3, with the nonsexualized the relatively highest of the three at -3.5 (Figure 8). The nonsexualized condition had a greater average emphasis on the appearance of women than self-appearance, but only by 1.5 points. Still, both experimental conditions showed a higher average objectification of woman score compared to the objectification of self, (sexualized by 5.5 points and

nonsexualized by 6 points), (Figures 8 and 9). The controlled condition saw less objectification of women than self-objectification by 2.2 points.

There are some differences in average scores between male and female participants. Figure 10 displays hostile and ambivalent sexism scores, separated by game condition and reported sex of the participant. Male participants displayed higher levels of both hostile and ambivalent sexism compared to females across all game conditions (Figure 10). This is perhaps expected, as females may be less likely to stereotype and display sexism towards other females when compared to males. Female participants' average hostile sexism in the sexualized condition was double that in the control and was quadruple the control value in the nonsexualized condition (Figure 10). These are both marked increases, which provide more detail than the overall data. Complete averages seen in figure 7 suggest a similar, though slightly lower, average score for hostile sexism in the sexualized condition compared to the control. Figure 10 displays this decrease in hostile sexism from control to sexualized condition is only for male participants: female participants show a drastic increase. Similarly, the decrease in ambivalent sexism from the control condition to the sexualized condition is a trend only displayed by male participants, with female participant's scores staying about the same (Figure 10). Both males and females show an increase across all types of sexism in the nonsexualized condition (Figure 10).

Figure 10

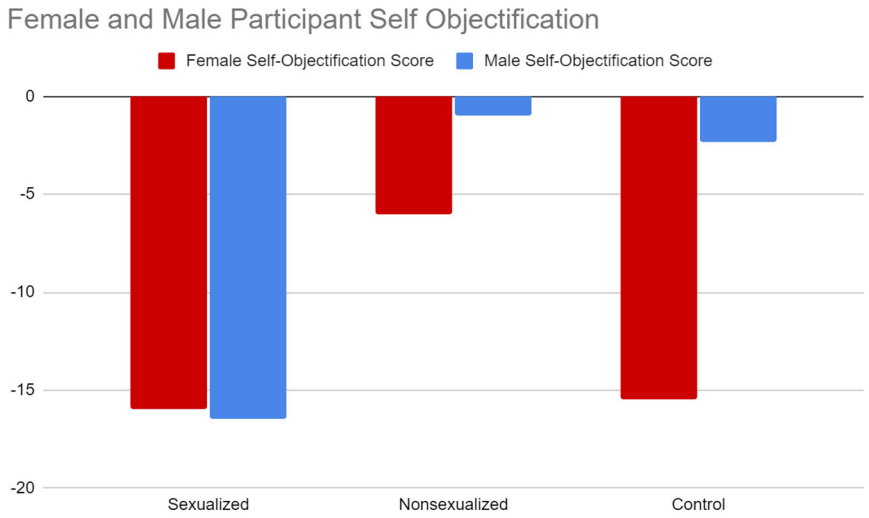
Comparison of Female and Male Participant Ambivalent and Hostile Sexism Across Conditions



Differences between male and female participants' self-objectification average scores across conditions were also analyzed, displayed in Figure 11. Female participants had the same low level of self-objectification across the sexualized and control conditions, with a marked increase in self-objectification in the nonsexualized condition (Figure 11). Males displayed higher variation with much less self-objectification in the sexualized condition, and similar much more self-objectifying scores in the control and nonsexualized condition (Figure 11). Self-objectification is measured by subtracting competence-based values from appearance-based values, so this data suggests male participants valued their physical appearance (sex appeal, attractiveness) far greater than their competence, when compared to female participants. This is contrary to perhaps the common, stereotyped opinion that females are more concerned with their physical appearance, focused on makeup and designer clothing. The sexualized condition sees a more similar value between male and female self-objectification scores, with slightly less self-objectification on part of the male average (Figure 11).

Figure 11

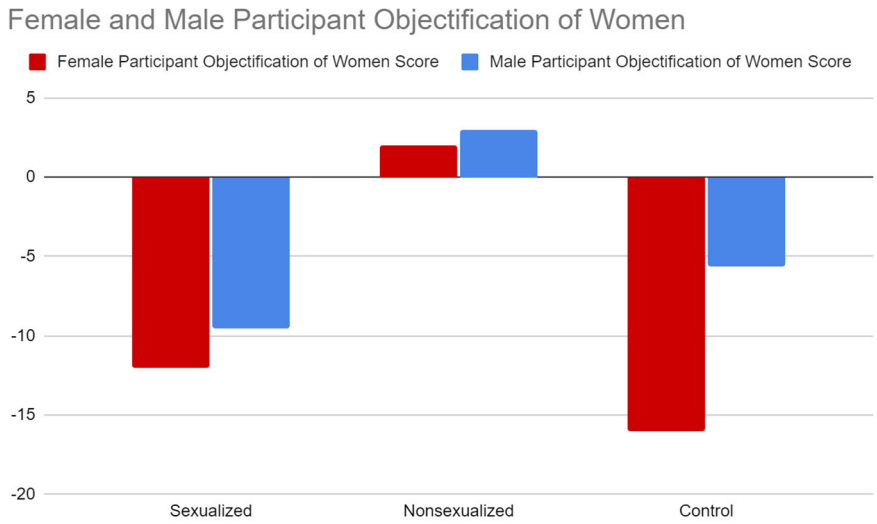
Comparison of Female and Male Participant Self-Objectification Across Conditions



Analyzing male and female participants' average objectification of women, shown in Figure 12, sheds light on key differences that are not seen in the total average result. The average shown in Figure 9 shows a similar score between the control and sexualized conditions for the objectification of women, with a slightly lower score for the sexualized condition. Figure 12 displays this decrease is the result of a male participant decrease, while the female participants show a higher objectification of women in the sexualized compared to the control condition. As with the other male and female comparisons, the sexualized condition seems to bring male and female differences closer to one another, with an increase in female score and decrease in males. The nonsexualized average scores, while slightly higher in male participants, display a similar trend to that seen in Figure 9.

Figure 12

Comparison of Female and Male Participant Objectification of Women Across Conditions



Conclusion

This study sought to examine the effects of sexualized video game characters on players' sexism, self-objectification, and objectification of women. Originally it was hypothesized that playing the sexualized condition would result in higher levels of sexism and objectification of women among both male and female participants, with an increase in self-objectification among female participants. A significant difference between the control and nonsexualized condition was not anticipated. The data from this study did not conform to expectations however, with the nonsexualized condition showing the highest average scores in the categories of sexism, self-objectification, and objectification of women. Female participants in the sexualized condition did show higher scores on these inventories compared to females in the control condition but displayed even higher scores in the nonsexualized condition. Male participants on average scored lower in the sexualized condition than males in the control, and higher or similar in the nonsexualized condition compared to males in the control.

One potential reason for lower scores for the sexualized category is the principle of demand characteristics. Demand characteristics occur when the participants attempt to conform to social expectations, to answer how they believe the researcher wishes them to answer, or purposefully try to skew results (Cherry, 2020). This study implemented deception by not revealing the purpose of the research until after the participants had completed the experiment and questionnaire, in an attempt to avoid demand characteristics from occurring. However, it is possible that the blatant sexualization of the sexualized condition, in addition to the questions concerning body image and sexism, cued those participants as to the nature of the study. Furthermore, the researcher conducting the study and interacting with participants was female. Participants may have felt pressure to answer in socially acceptable ways, specifically when confronted with an obviously scantily dressed female avatar.

These reasons do not, however, account for the higher results of the nonsexualized condition. Across all average scores, hostile and ambivalent sexism, objectification of self, and objectification of women, the nonsexualized condition scored the highest, and the sexualized condition scored the lowest. Some of these results in the sexualized and control conditions were largely defined by the male participants, as female participants displayed opposite trends to those seen in the total participant average in these conditions.

There are some limitations to this study that could contribute to skewed results. Limited participant pools could result in data easily skewed by outliers, and not representative of the general population. The ethnic distribution for this study was not far from that of the reported video game community ethnicity. The ESA reported 73% white, 8% African American, 9% Hispanic, 6% Asian/Pacific Islander, and 2% other, (2021). This study's distribution of 76.9% Caucasian, 23.1% African-American, and 15.4% Latino or Hispanic was, percentage wise, more diverse, though the Asian/Pacific Islander ethnicity was unrepresented. The average age of participants in this study (20 years), does not match the average age of the general gaming population (31 years) (ESA, 2021). Therefore, these results are not transferable to the general population, but merely provide insight into this community. The participants of this study were university students of an Assemblies of God affiliated institution, the values of which are different from a public university. As such, the data from running this study at a private Christian university is expected to be different than if this study were run at a public university, a potential avenue for future studies.

Another limitation is the short-term nature of this experiment. When seeking to examine the effects sexualized characters in video games have on players, the players will be interacting with the game for extended sessions multiples times across multiple days, weeks, or even years. These results are only after playing for half an hour, which may not display the same patterns of effects. Perhaps in the short term, players are alarmed and affronted by a sexualized avatar. After several sessions of play, it is possible the appearance of the character is normalized for the player, who may then accept the sexualization. Further

research on the long-term effects must be conducted to determine the true nature of interaction with sexualized video game characters.

With these limitations in mind, the results of this study are not justification for the continued sexualization of video game characters. Even though participants in the sexualized conditions reported less sexism, self-objectification, and objectification of others, many of their responses mentioned concern with the appearance of the female avatar. Participants outwardly writing that the participant needed more clothes and was inappropriately dressed displays a recognition and desire for a change of the sexualized avatar. Most strikingly was the participant who altered the settings within the game, giving the female avatar more clothing at the cost of the decreased in-game ability. A future study may provide players with the option of a scantily dressed avatar with powerful in-game abilities, or a modest but less-powerful avatar to see which is favored.

Video game characters are sexualized due to both the opinions and views of the video game development, as well as the culture as a whole. Participants speaking against the sexualized appearance of the female avatar is an indication that the current culture and player attitudes may no longer find this representation acceptable. As previously mentioned, results from the studied population cannot be generalized. To further examine current player attitudes towards the depiction of sexualized characters, further studies with more representative samples must be conducted. Further insight could be garnered by surveying views of game developing companies and comparing the results to those of players. Video game developers work to make games that cater to their audience, which has stereotypically been young males. With the more diverse player population today, video game developers may not be aware of the current expectations and views of their new target audience.

Spiking with the COVID pandemic, video game usage is likely to continue to remain a prevalent part of today's culture. The messages therein reach the diverse population of gamers, across ages, sex, ethnicity, and body type. Portraying these people groups accurately is not only important for players to feel

represented, but also can have implications on how those people groups are seen by others, or how they see themselves. This is not only a message for video game developers, but also for players to think critically concerning the messages in the content they are consuming.

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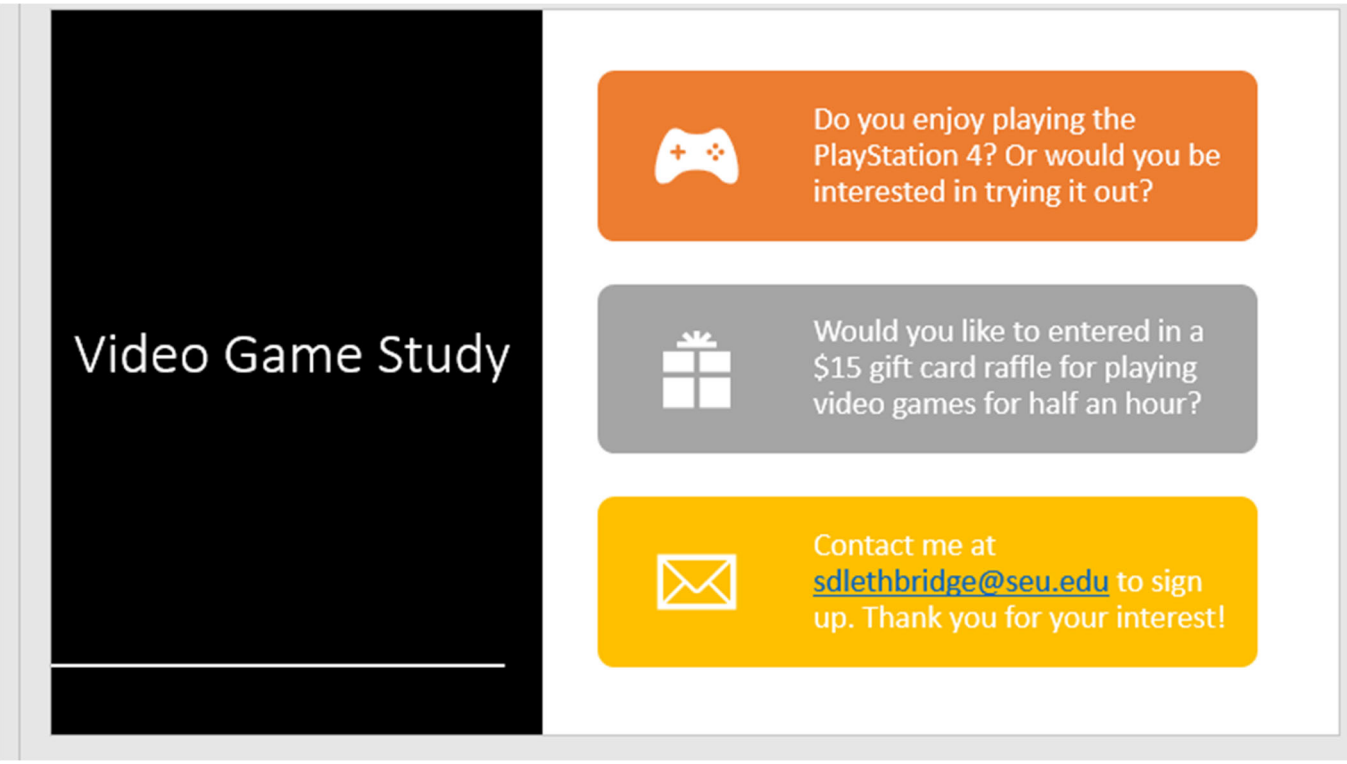
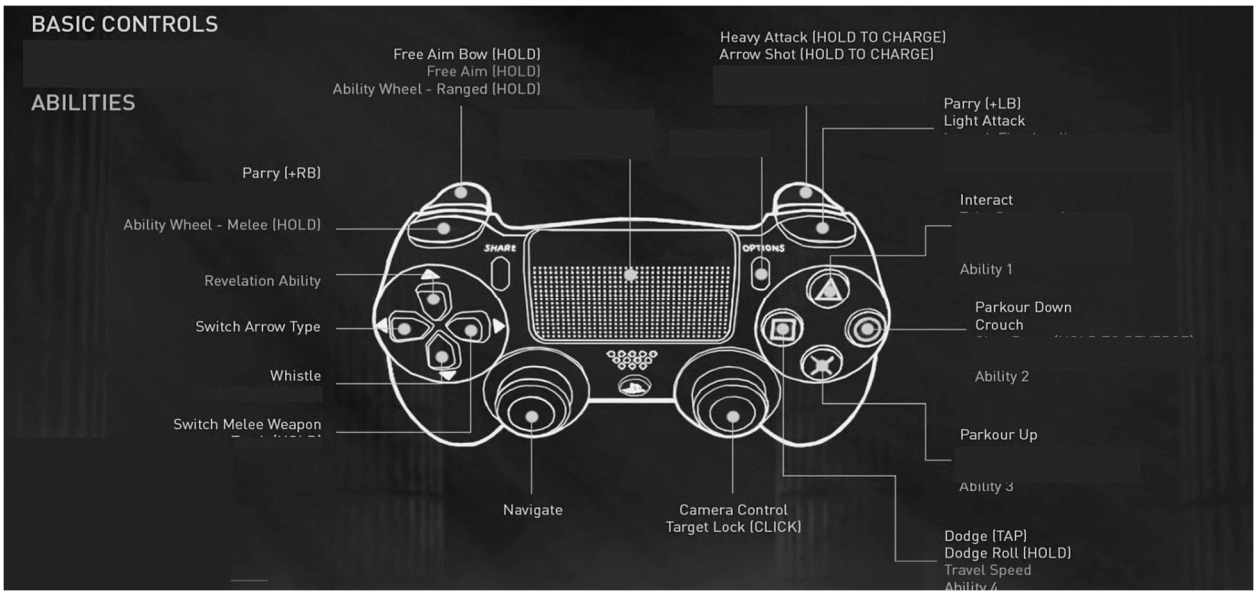
Appendices

Appendix A:


Video Game Study
Do you enjoy playing the PlayStation 4? Or would you be interested in trying it out?
Would you like to entered in a $15 gift card raffle for playing video games for half an hour?
Contact me at sdlethbridge@seu.edu to sign up. Thank you for your interest!

Appendix B:



Assassin's Creed Odyssey. (PlayStation 4) [Video game]. (2018). Quebec: Ubisoft

Appendix C:

- How often do you play video games?
    - Never
    - Once a month
    - Once a week
    - Multiple times a week
    - Every day
- How many hours do you play video games in a typical week?
- Have you played a PlayStation 4 console prior to the study today?
    - Yes
    - No
    - Maybe
- How familiar are you with the controls of the PlayStation 4 console?
    - Not at all familiar 1
    - 2
    - 3
    - 4
    - Very familiar 5
- Were you familiar with the video game you played today?
    - Yes
    - No
    - Maybe
- (If yes to the previous question) What was the name of the video game you played today?

- How would you describe the **appearance** of the avatar / player character in the game you played?
- How would you describe the **behavior / personality** of the avatar / player character in the game you played?

Appendix D:

Consent Form

PARTICIPANT INFORMATION

SOUTHEASTERN UNIVERSITY

Title: Effects of Playing Video Games

Investigator(s): Amy Beatty MLIS, Sarah Lethbridge

Purpose: The purpose of this study is to analyze effects of playing video games. You must be 18 years or older to participate.

What to Expect: This research study is administered in person in the Steelman Library. During the study, you will be asked to play a video game for 30 minutes, followed by a digital questionnaire. The first part of the questionnaire will ask basic demographic and video game usage information. The second portion of the questionnaire will ask questions regarding thoughts about yourself and others, as well as your perception of the video game you played. You may skip any questions that you do not wish to answer. You will be expected to complete the questionnaire once. It should take you about 20 minutes to complete.

Risks: The risks associated with this study are exposure to video game images of gore, violence, strong language, and partial nudity.

Benefits: There are no direct benefits to you. However, you may gain an appreciation and understanding of how research is conducted.

Compensation: You will be entered into a raffle for a $50 gift card. The winner will be notified at the conclusion of the study. The winner will decide between a Chick-fil-a gift card, PlayStation store gift card, an Amazon gift card, or a Starbucks gift card (all of equal $50 dollar value, only one card chosen).

Your Rights and Confidentiality: Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time.

Confidentiality: The post-study questionnaire will not request your name nor any identifying personal information. This maintains confidentiality by keeping your answers anonymous. 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 on a password protected computer in a locked office and only researchers and individuals responsible for research oversight will have access to the records. Data will be destroyed five years after the study has been completed.

Contacts: You may contact any of the researchers at the following addresses and phone numbers, should you desire to discuss your participation in the study and/or request information about the results of the study: arbeatty@seu.edu

If you have questions about your rights as a research volunteer, you may contact the IRB Office

IRB@seu.edu

If you choose to participate: Please, click **NEXT** if you choose to participate. By clicking **NEXT**, you are indicating that you freely and voluntarily and agree to participate in this study and you also acknowledge that you are at least 18 years of age.

It is recommended that you print a copy of this consent page for your records before you begin the study by clicking below.

Appendix E:

Recruitment email

Good morning [Professor Name],

I am currently working on my honors thesis, with a focus on studying the effects of playing video games. I have set up a study which would involve participants playing a console video game for half an hour in the Steelman Library, then filling out a questionnaire. This study has been approved by the IRB. Would you be willing to share the attached promotional powerpoint slide with some of your classes?

Thank you,

Respectfully,

[redacted]