Examining Female Gamers’ Perceptions and Attitudes of Behaviors in the Gaming Community

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Abstract

In recent years video games have grown into a mainstream pastime. The internet and use of social media have made it easier for gamers to interact, and have made communications open to the public. Recent public displays of harassment have led to discussions of sexism in gaming culture. Gaming is generally considered a male dominated culture, and previous research on the impact of video games on problematic behavior predominantly focused on males. We now know female gamers are a prominent demographic (ESA, 2015; Stuart, 2014), and since they are often the target of sexual harassment it is important to examine their perspective of these behaviors. This study surveyed female gamers in order to identify their general attitudes towards and perceptions of sexual harassment. Similarly to previous research, attitudes and perceptions of sexual harassment were negatively related; greater tolerance towards sexual harassment led to identifying fewer behaviors as sexual harassment. The hypothesis that participants who predominantly played Mature rated games would lead to more tolerant attitudes of sexual harassment was not upheld. Exploratory analysis found that the role-playing and sports genres were significantly related to general sexual harassment attitudes. Interest in the sports genre was positively related to tolerant attitudes of sexual harassment. However, interest in the role-playing genre was negatively related, as interest in role-playing games increased, participants had less tolerant attitudes of sexual harassment. Finally, examining aspects beyond sex such as gender role orientation is discussed as a direction for future research.

Keywords: video games, sexual harassment, female gamers, video game players
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The landscape of video games has changed drastically since Atari debuted *Pong* as an arcade game in 1972 (Sellers, 2001). *Pong*’s subsequent home release, and the later advent of computer games, brought gaming into the home. The social center for gamers subsequently shifted from gathering in arcades to video game stores. Over 40 years of technological advancements later, we live in an age where video games are increasingly prevalent in mainstream society. The internet in particular has opened up the gaming community from gathering at local game stores to a larger and more public sphere (Salter & Blodgett, 2012). The UK Internet Advertising Bureau found that women comprised 52% of the UK gaming audience (Stuart, 2014). As many news stories chose to comment, gaming is not just the hobby of young men anymore. This once niche hobby and community has been gaining more mainstream attention, which necessarily opens it up to greater scrutiny. Current issues under scrutiny are the potential behavioral effects of violent gameplay and exposure to explicit sexual content or hypersexualized female characters. Accusations of problematic behavior among players, such as sexism and sexual harassment, are more openly discussed, as these offenses take place over public social media outlets such as Twitter. Researchers have also taken interest in these concerns, from examining the perceptions and attitudes held by members of the video gaming community to the effects of video games on player behavior.

**Gaming, Perceptions, and Problematic Behavior and Attitudes**

What separates video games from other forms of media entertainment is that rather than passively watch (such as with television and movies) players directly interact with the medium. Players often step into the shoes of the central character, and their choices can have a direct impact on how aspects of the story or gameplay unfold. This interaction between consumer and
medium makes video games a culturally relevant topic for researchers. Players’ hands-on involvement in resolving the game’s plot, often through the use of violence, creates a concern about the potential impact on players’ behavior and attitudes regarding violent or aggressive behavior.

The prominent presence of violence within certain games led to studies about aggression in connection to video games. Dietz (1998) performed a content analysis of popular home video games regarding the presence of aggression, violence, and character roles and gender. Out of the 33 games analyzed, 80% contained gameplay or narratives that included aggression, 27% included “socially acceptable aggression” (eg. football or other contact athletic action in sports themed games), and 50% included violence towards another character (either human or a fictional non-humanoid species; Dietz, 1998). Bartholow and Anderson (2002) found that participants who played a violent video game (Mortal Kombat) were more aggressive (measured by participants setting higher intensity noise punishment) than participants who played the nonviolent control game (PGA Tournament Golf). Males participating in the study also set the punishment noise at a higher intensity than female participants (Bartholow & Anderson, 2002). In addition, there was an interaction between sex and video game condition: males who played the violent video game set the punishment noise to a higher intensity than males in the control condition (Bartholow & Anderson, 2002).

Other researchers took notice of the sexualized content in some games and looked into exploring their impact on problematic behaviors such as sexual harassment. Dill, Brown, and Collins (2008) observed main effects for both sex and media content (Professional Images vs Sex-Typed Video Game Images), as well as a significant interaction between media content and participant sex on sexual harassment judgements. Males exposed to Sex-Typed Video Game
Images (gender stereotypical images of macho and aggressive male characters, as well as sexualized and degraded female characters) from various video games (presented in a slide show) held significantly more tolerant sexual harassment attitudes when presented with a real-life scenario (between a male professor and his female student), than those shown the control Professional Images (photographs of male and female congressional members in profession attire; Dill, Brown, & Collins, 2008). However, this study only focused on static images from video games. Another weakness was that the control images were photographs of actual humans, rather than video game characters. A game that allows character and outfit customization, such as *The Sims*, could have been used to provide the visual of a game character in professional attire.

Since the main draw of video games is their interactivity, sexual harassment researchers expanded to include actual gameplay in their methods. Rather than just viewing stationary images, Yao, Mahood, and Linz (2010) tested the short term impact of playing a sexually explicit video game where the female character was sexually objectified (*Leisure Suit Larry*), compared to control games (*The Sims* and *PacMan II*) on male players. Participants in the condition who played the sexually explicit game displayed more sex-related thoughts than participants in control conditions, as evidenced by the word response task. Participants in the sexually explicit game condition had decreased reaction times for sexual words and sexually objectifying words pertaining to females, compared to neutral words and non-words (Yao et al., 2010). In addition, the answers given by males in the sexually explicit game condition for the Likelihood to Sexually Harass Scale (Pryor, 1987 as cited by Yao et al., 2010), display a significantly greater tendency to sexually harass than those playing the control games (Yao et al., 2010).
Other problematic attitudes, such as rape myth acceptance, have also been studied in relation to video games. Male and female participants in the experimental condition watched a researcher play a video game, *Grand Theft Auto 5 (GTA5)*, where female characters were sexually objectified (portrayed as strippers and sex workers) and one was murdered by the player (Beck, Boys, Rose, & Beck, 2012). Participants in both the experimental and control (watching a baseball game) viewing groups were randomly assigned to either view the material and take a posttest to measure their rape myth acceptance attitudes, or to take a pretest before completing the viewing and posttest in order to judge testing effects. While there was no significant effect for watching the violent and sexist material, there were main effects for sex. Males had significantly increased posttest scores for rape myth acceptance across both conditions, while females did not differ between pretest and posttest scores and had significantly lower scores overall. Again there is concern that the control utilized in the study was not an equivalent stimulus. Since the researcher was in control of the gameplay, they could have engaged in non-violent and non-sexist tasks such as driving around and completing non-violent missions. If it was deemed impossible to consistently avoid violent or sexist situations in *GTA5*, then an alternative non-violent game (*The Sims*; a life simulation game) or one where violence was more easily avoided due to a lower game rating (*Crazy Taxi*; where players drive around and deliver passengers) could have been used.

Chong, Teng, Siew, and Skoric (2012) explored the cultivation effects, or how video games may impact one’s perception of reality, in participants who spent an extended time exposed to a video game with violent and other explicit content such as drug usage. Participants were males and females selected for their lack of experience with violent media (such as television and video games) based on a survey of media usage. They were randomly assigned to
either play *Grand Theft Auto 4 (GTA4)* in the lab for four hours a week over three weeks, or the control group who only filled out the questionnaires (Chong et al., 2012). *GTA4*, like other games in the *GTA* franchise, allows players to explore and interact with an environment that is violent, sexually explicit, and allows participation in other illegal activities such as high speed car chases and drug usage. Participants in the gaming condition showed significant first-order judgements for drug usage and car accidents, meaning that they perceived these events to occur in reality more frequently than participants in the control group. Sex differences were not explored by the authors. There was not a significant effect for first-order judgements of assault; however, the authors (Chong et al., 2012) wonder if this may be a cultural difference as the experiment took place in Singapore, which is known for its low crime rate. The presence of crime may be less relatable to residents of Singapore than residents of cities with higher crime rates, such as Chicago or New York City. However, this study shows the impact of video games on perceptions of reality, and fits within the previous research that displays how playing (and even watching) explicit content, either violent or sexualized, can impact the attitudes of the participant.

**Women, Video Games, and Sexism**

Part of the concern surrounding sexual harassment (and other problematic sexist behaviors) and gaming is the sparse female representation in video games. Dietz (1998) found that among the top 33 most popular video game titles, over half of them did not have a single female character present. Beyond that, when female characters are featured in games, they were often sexually objectified, victims (often of violence or sexual abuse), or both (Dietz, 1998). There is a clear deficit of realistic, relatable, or well-rounded female characters in the rosters of
video games. Dietz (1998) discussed concern over how this absence deprived gamers, especially female players, of potential positive female role models.

The issues surrounding female representation in video games are still relevant, and have drawn attention, concern, and criticism from the public. Sarkeesian, creator of the Feminist Frequency website and youtube channel, produces the internet video series Tropes vs Women In Video Games, which looks at the potential sexism surrounding female characters in video games (Feminist Frequency, 2012). An example is the prevalence for female characters in video games to either be placed in the way of harm (e.g. the damsel in distress) or objectified for the purpose of furthering the protagonist’s (often a male character) story, or for the titillation of the audience. The response to these videos has been harassment and numerous threats of violence and rape directed at Sarkeesian (Rott, 2014).

Unfortunately, this trend of aggression towards criticisms of video games and the gaming community, particularly from female commentators, has been previously observed. Salter & Blodgett (2012) documented the Penny Arcade “Dickwolves” incident in 2012 and utilized it as a case study of gamers, who once formed an insular community but are now forced to function in the public sphere of the internet, who favor the hypermasculine and male dominated power structure. After a rape joke was featured in the popular gaming themed webcomic, Penny Arcade, creators Gabe and Tyco (Krahulik and Holkins respectively; 2010) responded to criticism through an apology comic strip considered rife with sarcasm and hostility. In addition, as the founders of the Penny Arcade Expo (PAX) gaming convention, Krahulik and Holkins are influential voices in the gaming community. Their flippant response to the criticism was viewed as an endorsement for dismissing such criticism, with some fans even going so far as to harass said critics.
These concerns expand beyond anecdotal experiences and case studies. During online matches of *Halo 3* (a first person shooter game where players are randomly matched into teams that work together to defeat an opposing team) experimenters played pre-recorded voice clips (male or female) of neutral sayings (e.g. “Hi everybody.”), or no voice for the control, and recorded how other players interacted with the researcher account (Kuznekoff & Rose, 2012). Coders then listened to the recordings and coded statements made to the experimenter account as positive, negative, or queries. The authors did not statistically examine the sex of the gamers responding to the voice conditions. Kuznekoff and Rose (2012) found that while there was not a significant difference between the male and control (no voice) conditions, the female voice condition received nearly three times as many negative comments and received significantly more queries and messages (outside of game messages, such as friend requests). This evidence displays that there is merit to the argument that females playing video games are treated differently (and potentially more negatively) by their fellow players.

**Sexual Harassment, Masculinity, and Player Behavior**

In the United States, sexual harassment is defined by the U.S. Equal Employment Opportunity Commission (EEOC; 1980) as harassment based on the victim’s sex, either through “unwelcome sexual advances, requests for sexual favors, and other verbal or physical harassment of a sexual nature,” as well as “offensive remarks about a person’s sex.” Sexual harassment behaviors can also be sorted into the two following categories: quid pro quo, where sexual conduct is proposed in exchange for employment benefits or to prevent losing them; and hostile work environment, when an abusive working environment is created by the prevalence of sexual harassment behaviors (e.g. sexist jokes, lewd comments, unwanted sexual advances; Rotundo & Sackett, 2001). While the definition (especially the quid pro quo type harassment) primarily
describes the work setting, sexual harassment behaviors that characterize a hostile work
environment can also occur through social media interaction. If the type of discussion
surrounding the *Penny Arcade* incident had happened within an office space, it would have
fulfilled the EEOC’s criteria for sexual harassment through the individual comments, as well as
the hostile environment fostered by sections of the *Penny Arcade* fan community. Unfortunately
the internet does not have a Human Resources Department with whom to file such complaints,
and Krahulik and Holkins’s permissive attitudes do not help improve the situation.

The hypermasculine atmosphere surrounding video games, characterized by their
potentially competitive nature and often violent and oversexualized content, allows them to often
still be stereotyped as a hobby for young males. Female players did not suddenly make up 52%
of the UK gaming audience overnight (Stuart, 2014). In addition, the United States based
Entertainment Software Association (ESA, 2015; ESA, 2016) publishes reports about sales,
demographic and usage data of video games. The reports stated that females made up 44% of all
video game players in 2015, and 41% in 2016 (ESA, 2015; ESA, 2016). In addition, the ESA
reported (2015; 2016) there were significantly more female players age 18 and older (33% in
2015 and 31% in 2016) than male players 18 and younger (15% in 2015 and 17% in 2016).
Female gamers are a substantial portion of the video game players and an important population
to include in video game research.

Ogletree and Drake (2007) observed that while significantly more men played video
games for longer periods during the week, a sizeable group of the women surveyed played video
games consistently on a weekly basis. Growing anecdotal evidence of the gaming community as
a hostile environment towards female players combined with existing video game research now
puts a spotlight on females and their experiences as gamers. Schott and Horrell (2000) conducted
ethnographic interviews and gameplay observations with child and adult participants who self-identified as “girl gamers” in order to explore their attitudes and how they interacted with video game technology. The authors explored personal ownership compared to secondary access (primary ownership belonging to another household member) of video game consoles. Even when the participant was the primary owner, it did not guarantee that they would be in charge of their gaming experiences. They would often compete for playtime with males in the household and even when playing together, the girl gamer would often find herself as the observer or allowing the males she was playing with to beat the more difficult gameplay (Schott & Horrell, 2000). The participant experiences and responses reinforce the concept that video games are a male dominated activity, even within the home.

Norris (2004) surveyed women about their computer usage online, specifically comparing women who play computer games to those who did not (instead participating in online forums or chat groups). Women who played video games on their computers reported less sexual harassment compared to their nongaming peers. In addition, among women gamers those whose favorite games were aimed at mature audiences (similar to movies receiving an R rating) reportedly experienced less sexual harassment and considered the internet to be more friendly (Norris, 2004). One issue with this study was that sexual harassment was self-defined, as participants were not given a specific definition of what constitutes sexual harassment. Norris (2004) argues that women gamers who prefer games rated Mature (equivalent of an R movie rating) may potentially be savvier in their online interactions, such as knowing skills to help avoid sexual harassment. It may also be possible that their preference for more mature games (or an impact of playing such video games) may contribute to the lowered perceptions of sexual harassment.
The interaction of video games, sexism, and the player’s sex and gender is a topic shared by other researchers. Fox and Tang (2014) created a scale to measure video game sexism that focused on whether or not sexist notions about female players (eg. they only game for male attention) were endorsed. They found that higher levels of certain masculine norms (heterosexual self-presentation and power over women) and higher social dominance orientation (belief that some groups were superior and deserving of more power) significantly predicted higher video game sexism (Fox & Tang, 2014). While participant sex and age were significant predictors on their own, those factors were no longer significant predictors when compared to masculinity and social dominance orientation factors.

On a more experimental front, Fox, Ralston, Cooper, and Jones (2014) found that female participants exposed to sexualized avatars in the game Second Life had significantly higher state self-objectification levels. While there was no direct effect between avatar type (sexualized vs non-sexualized) on participant rape myth acceptance scores, it could be considered a mitigating factor because higher levels of state self-objectification predicted increased rape myth acceptance scores (Fox et al., 2014). Fox and Potocki (2015) surveyed participants about their video game usage from childhood to adulthood, and found that video game usage was positively correlated to interpersonal aggression, which was positively related to hostile sexism. Interpersonal aggression and hostile sexism were both positively correlated to first-order (perceptions of false accusations of rape) and second order (RMA score) cultivation of rape myth acceptance (RMA; Fox & Potocki, 2015). Despite males and females participating in the study, sex was not examined as a factor by the authors. In addition, the concept of game usage was limited to only the amount of time played and did not include game genre or rating. These findings add to the growing literature around women, video games, and sexism; however, there
are further details to explore, such as what types of games these female participants have experienced. One limitation both of these studies faced was a lack of female players with various levels of experience (especially highly experienced video game players), also known as “heavy” or “hardcore” gamers.

**Current Study**

This study examined female gamers’ general attitudes towards sexual harassment. More specifically, the study examined if they perceive a variety of sexually harassing behaviors such as catcalling, solicitation of sex or nude images, gendered insults, or aggressive or demeaning sexual language as forms of sexual harassment. The study also examined if these attitudes and perceptions differed depending on the following factors: current gaming usage (VGU current), youth game usage (VGU youth), number of gaming devices owned, how strongly they identify as a “gamer” (community salience), and the types of games played (rating, genre, and solo vs multiplayer). Social media usage was also measured, since it provides a platform for gamers to interact and has been linked to public displays of aggression in the gaming community (Salter & Blodgett, 2012).

Previous surveys of female and women gamers regarding sexual harassment focused on personal experience with it, relying on general replies of whether individuals felt they, or someone they knew, had been sexually harassed (Norris, 2004). These studies failed to use established measures to examine perceptions of which acts were considered sexual harassment and did not measure participants’ general attitudes toward sexual harassment. Studies utilizing more established measures that assessed other problematic sexist behaviors (eg. hostile sexism, self-objectification rape myth acceptance), did not examine the types of games their participants played, and did not have a sample encompassing a range of experience levels with video games.
(Fox et al., 2014; Fox & Potocki, 2015). This study was designed to address these shortcomings. The researcher predicted (H1) that female gamers with more tolerant attitudes of sexual harassment would perceive fewer behaviors as such, upholding previous research (Mazer & Percival, 1989; Foulis & McCabe, 1997), and (H2) that female gamers who predominantly played Mature rated games, would have more tolerant attitudes of sexual harassment.

**Methods**

**Participants**

A total of 121 participants at least 18 years in age were recruited through the following three online sources: the Marietta College campus email system, social media, and a forum primarily aimed at female gamers. The three criteria for participation were: the individual was female, self-identifies as someone who plays and has a basic understanding of video games, and is at least 18 years of age. The goal was to have a sample of video game playing participants across a range of experience levels. In particular, to have enough players with high usage and experience levels (something previous studies have struggled with) to compare to their less experienced counterparts. The link to the survey was distributed via email, social media, and online special interest forums such as the r/GamerGirls forum on Reddit (Appendix A). All participants were entered to win a $25 Amazon gift card, and eligible participants also received research participation credit for their introductory psychology class.

**Materials**

Informed consent documents (Appendix B), demographic questions, and included measures were compiled into a survey using the data collection program Qualtrics. The demographics questionnaire (Appendix C) collected basic information (age, race, etc.) about participants and the types of video games (rating, genre, and single vs. multiplayer) that most
interest them. Interest in gaming genre was measured using a Likert scale from 1 to 5, with a higher number indicating a higher level of interest. Playing habits of single-player compared to multiplayer gaming was measured using a Likert scale from 1 to 5, with a higher number indicating a greater amount of time playing that style of game. Players were asked to indicate which rating ranging from “everyone” (1) to “adults only 18+” (5) reflected the majority of games they played, with higher scores indicating increasing levels of mature content within the game.

Participant video game usage (current VGU) and youth usage (youth VGU) were assessed with the Video Game Usage Scale (VGU; Appendix D), a modified form of the Lifetime Television Exposure Scale (LTE; Riddle, 2010). The LTE had been previously modified for measuring video game usage (Fox & Tang, 2014; Fox & Potocki, 2015) by replacing phrases such as “watch television” to “play video games.” Fox and Potocki (2015) found that Cronbach’s reliability was $\alpha = .90$ for childhood, $\alpha = .89$ for adolescence, and $\alpha = .82$ for current use when utilizing the scale to measure video game usage. This study collapsed the childhood and adolescence sections into a single category for youth video game usage (defined as childhood through age 17). This was done in order to shorten the overall length of the survey, and because it was anticipated that the adolescent and current use sections would be redundant to younger participants, particularly those in college. The VGU asks participants about their video game usage currently and during their youth, ranging from 1 (Never) to 7 (Almost Always) in reference to specific times of the day across weekdays and weekends. A composite score was calculated with higher scores indicating greater video game usage.

Participant attitudes towards sexual harassment were measured using the Sexual Harassment Attitude Scale (SHAS) from Mazer and Percival (1989; Appendix E). The SHAS
(Mazer & Percival, 1989) is an established scale with a reliability coefficient alpha = .84. A composite score is calculated (maximum score 90, minimum 18), with higher scores indicating more tolerant attitudes towards sexual harassment SHAS (Mazer & Percival, 1989). Sexually harassing behaviors and how they might be perceived were examined using vignettes intended to mimic sexually harassing behavior players may witness while gaming, or otherwise interacting with the gaming community over social media (Appendix F; modified SHDQ). This format was inspired by the Sexual Harassment Definitions Questionnaire (SHDQ) from Foulis and McCabe (1997). A vignette describing an act of sexual harassment was presented and then followed by asking the participant to select (from a list of positive, neutral, and negative emotions) how they would feel if they were the target, and if the behavior described is sexual harassment (yes or no). There were 10 total vignettes, making the maximum score 10 (defining all scenarios as examples of sexual harassment) and a minimum of 0. For the modified SHDQ used in the study, new vignettes were created based on real life experiences of sexual harassment that gamers submitted to the website Fat, Ugly, or Slutty (2017).

**Procedure**

Participants clicked on a link to the survey that first led them to a page requesting a password. Participants were informed by the text posted with the survey link to message the researcher for the password. Once the password was entered, the participant was taken to the Informed Consent page. Once they read and completed the Informed Consent page, they could complete the survey (demographic questionnaire, VGU current and youth, SHAS, modified SHDQ). Following the demographic questionnaire, the VGU was presented, with the order of current and youth game usage counterbalanced. The SHAS and modified SHDQ were counterbalanced and were presented after the VGU. The four elements (VGU current, VGU
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Youth, SHAS, modified SHDQ) were not fully randomized in presentation order to preserve face validity by making a more cohesive study experience in order to avoid potential suspicion and social desirability bias. The VGU scales were presented first because they function as an expansion of the demographic questions about participant gaming habits. Not only were the scales measuring aspects of sexual harassment counterbalanced, but within their respective scales, the order of the questions (SHAS) or vignettes (modified SHDQ) were also presented randomly. Upon completion, participants were brought to a page thanking them for their participation, which also contained contact information for the researcher if they had questions (Appendix G). If they select answers in the demographics questionnaire that did not meet part of the study criteria (female or being 18 or older), then the survey ended and they were automatically directed to the completion page.

**Results**

The study had a total 121 respondents, of which 114 participants provided data that could be included in the analysis. Five participants did not complete the survey, and two were screened and sent directly to the completion page by Qualtrics for failing to meet the participation criteria (identified themselves as male). In addition, one participant’s data was excluded from exploratory analysis when examining “number of gaming devices” as a variable, due to being an outlier. Said outlier reported owning 329 total gaming devices (no less than 40 items in each device category), which was more than double the second highest total device number (116).

Statistical assumptions of normality were performed on the outcome variables of sexual harassment attitudes (SHAS scores) and perceptions of sexual harassment (modified SHDQ scores). The Kolmogrov-Smirnov test found that the variable sexual harassment attitudes does not have a significant difference from a normal distribution ($p = .19$). However, the histogram
displayed a positive skew, the presence of segments and deviation from the line of normal distribution, and it falls outside of the normal range with skewness of .91 ($SE = .23$) and kurtosis of 1.94 ($SE = .45$). The assumption of normality had not been met for sexual harassment attitudes. A log transformation was performed on the SHAS scores, now referred to as LgSHAS scores. The Shapiro-Wilk test found that the variable sexual harassment attitudes does not have a significant difference from a normal distribution ($p = .09$). The histogram displayed a more normal distribution, the presence of segments and deviation from the line of normal distribution, and it falls within the normal range with skewness of -.02 ($SE = .23$) and kurtosis of -.10 ($SE = .45$). With the use of a log transformation, overall the assumption of normality has been met for general sexual harassment attitudes (SHAS scores).

The Kolmogrov-Smirnov test found that the variable sexual harassment perceptions (modified SHDQ scores) does have a significant difference from a normal distribution ($p < .00$). However, the histogram displayed a mostly normal distribution, despite the presence of segments it fits the line of normal distribution, and it falls within the normal range with skewness of -.18 ($SE = .23$) and kurtosis of -.11 ($SE = .45$). Since it meets four of the five criteria, and attempts at variable transformation did not help, the assumption of normality has been met for perceptions of sexual harassment (modified SHDQ scores).

The average age of participants was 27 ($M = 27.04$, $SD = 7.79$), who owned an average of 16 gaming devices ($M = 13.66$, $SD = 15.98$). When asked how about identifying as a “gamer” or part of the video gaming community, on average participants fell between “undecided” and “agree” ($M = 3.99$, $SD = 0.94$). The two game genres with the greatest amount of interest were adventure ($M = 4.50$, $SD = 0.83$) and role-playing ($M = 4.36$, $SD = 1.13$), while sports ($M = 1.57$, $SD = 0.96$) and survival horror ($M = 2.77$, $SD = 1.45$) had the least interest. Out of 10 vignettes
depicting a form of sexual harassment, on average participants identified 54.4% ($M = 5.44$, $SD = 2.37$) of the vignettes as sexual harassment (modified SHDQ scores). However, on average 92.5% ($M = 9.25$, $SD = 1.17$) of the vignettes were associated with a negative emotional response, while there was a 7.9% ($M = 0.79$, $SD = 1.06$) neutral response, and a 1.4% ($M = 0.14$, $SD = 0.53$) positive response. A full list of means and standard deviations for all variables can be found in Table 1.

It was predicted (H1) that gamers with more tolerant attitudes of sexual harassment would also perceive fewer behaviors as sexual harassment. Using a Pearson correlation there was a significant negative relationship between participants’ general attitudes towards sexual harassment and their perceptions of sexually harassing behavior, $r (114) = -.42$, $p < .001$ (Table 2; Figure 1). As SHAS scores increased (indicating more tolerant attitudes regarding sexual harassment) the modified SHDQ score (or number of vignettes perceived as sexual harassment) decreased. These results reaffirm previous research examining the connection between general attitudes towards sexual harassment and perceptions of sexually harassing behavior (Mazer & Percival, 1989; Foulis & McCabe, 1997).

It was also predicted (H2) that gamers who predominantly played Mature rated games, would have more tolerant attitudes of sexual harassment. Simple linear regression indicated that predominantly playing Mature rated games did not have more tolerant attitudes of sexual harassment $b = -.02$, $t(113) = -1.62$, $p = .11$ (Table 3; Figure 2).

Exploratory analysis examined the predictor variables level of gaming experience (youth VGU score, number of gaming devices), video game usage (current VGU score), types of games preferred (game rating, single-player, multiplayer, genre), and how strongly they identify as a “gamer” (community salience) for the outcome variables participant attitudes towards sexual
harassment (SHAS score) and perceptions of (modified SHDQ score). Stepwise multiple regression created a model including participant preference for the role-playing game genre that predicted a significant amount of variance of the attitudes towards sexual harassment, $R^2 = .06$, $F(1, 111) = 7.39, p < .01$. In a model which included participant preference for the sports game genre and the role-playing game genre, a significant portion of the variance for attitudes toward sexual harassment was also explained $R^2 = .10, \Delta R^2 = .03, F(2, 110) = 5.88, p < .01$ (Table 4; Figure 3; Figure 4). In the first model attitudes towards sexual harassment was significantly predicted by interest in the role-playing game genre, $b = -.03, t(111) = -2.72, p < .01$. When interest in the sports game genre is added to this model, attitudes towards sexual harassment was significantly predicted by interest in the role-playing game genre, $b = -.03, t(110) = -2.85, p < .01$, and interest in the sports game genre $b = .02, t(110) = 2.04, p = .04$ (Table 4; Figure 3; Figure 4).

**Discussion**

This study found that there was a significant negative relationship between participants’ general attitudes towards sexual harassment and their perceptions of sexually harassing behavior. Less tolerant attitudes towards sexual harassment were related to perceiving more behaviors as sexual harassment, while more tolerant attitudes were related to perceiving fewer behaviors as sexual harassment. This result replicates the negative relationship that Mazer & Percival (1989) found between general attitudes toward sexual harassment (SHAS score) and perceptions of seriousness, commonness, and definitions of sexual harassment, as well as what Foulis and McCabe (1997) observed using the SHAS and SHDQ to measure attitudes and perceptions respectively.
No relationship was found between participants predominantly playing Mature games and their attitudes towards sexual harassment. Norris (2004) found that female gamers who preferred games rated Mature reported fewer instances of being sexually harassed and found the internet to be friendlier. This study had initially theorized that predominantly playing Mature games and more tolerant attitudes towards sexual harassment were related. Either the sexually explicit or violent aspects of Mature games could be desensitizing, or someone more tolerant of sexual harassment would not be bothered by, or even recognize, its presence in a game. However, the results of the study do not support this argument. It is important to consider that while sexual material (nudity, sexual language or humor, sexual themes, sexual content, sexual violence, etc.) and violence are notable forms of mature content, they are not the only ones. According to the Entertainment Software Rating Board (ESRB; 2017a), additional aspects of content that factor into a game’s rating include gambling, profanity, and the presence or reference to substances such as tobacco, alcohol, and drugs. The video game Peak Entertainment Casinos has an Adults Only 18+ rating for gambling and the ability to gamble with real currency (ESRB, 2017b). While a participant may play games with more mature content, the current study’s method of asking about the specific rating participants predominantly play may not accurately measure how much of that mature content is sexual or violent in nature. When Norris (2004) asked the female participants in the study to name their favorite video game, none of the Mature games received that rating for graphic sex or violence. While still useful to consider, a game’s rating cannot be treated as the sole means of judging its contents. It is important for researchers to follow up with questions to better define what content is being consumed by players.
Exploratory analysis identified that there was a relationship between interest in the role-playing and sports game genres and general attitudes towards sexual harassment. Interest in the role-playing game genre was negatively related to attitudes of sexual harassment; as interest in role-playing games rose, attitudes towards sexual harassment were less tolerant. Role-playing video games are often time commitments to finish and focus on single player experiences. In addition, role-playing games can offer players a wide range of subgenres, from first-person shooter science fiction to fantasy battle strategy games. Even within the same role-playing game players can have vastly different experiences, since many modern games have different morality paths based on in-game choices. These branching paths allow one to engage in an experience that ranges from excessive violence to pacifism. The emphasis on player experience explains why players may find themselves deeply invested in the game. Mahood and Hanus (2017) studied the emotional impact of role-playing video games on players, especially when exposed to immoral actions. Participants in the condition that viewed an immoral game character’s backstory (characterized by emotionally and physically violent behavior) and were then instructed to continue playing in an immoral manner led to feelings of fear hostility, and sadness (Mahood & Hanus, 2017). Those participants indicated a greater willingness to select rude or forceful in-game actions, compared to those in the moral background condition, but they also significantly reported guilt for those actions (Mahood & Hanus, 2017). While the role-playing game genre can encompass many experiences, the emotional nature of these gaming experiences could lead players to be more sensitive and less tolerant of other negative behaviors such as sexual harassment.

Interest in the sports game genre was positively related to attitudes of sexual harassment; as interest in sports games rose, attitudes towards sexual harassment were more tolerant. Dietz
(1998) referred to sports as a form of “socially acceptable aggression.” Many sport themed video games are based off of contact sports such as soccer, American football, hockey, and basketball, although sports games based on non-contact sports such as golf and tennis do exist. In addition, hunting games are another form of potentially violent games that fall under the sports game genre. As previously discussed, Bartholow and Anderson (2002) found that violence in video games can provoke aggression in participants. Even games based on a more socially accepted form of aggression, such as sports, could lead to other problematic behaviors.

**Limitations and Future Directions**

An area of the study that could be improved upon were the recruitment practices. Some aspects of the social media recruitment could be seen as problematic. A description of the study and a link were posted publicly on the researcher’s Facebook page, as well as a request for others (whether they could participate or not) to share the post. This sampling procedure shares issues with snowball sampling, because people in the same social media circles are likely to hold similar beliefs. The justification was that female gamers are a specific population that might be difficult to amass an adequate sample size, and that it only made up one of the three ways participants were recruited online. While the method of asking those over social media to further help expand the subject pool brought in more participants, it may not have provided a truly representative sample. A more pronounced limitation that compounded the previous issue is that the researcher did not differentiate the survey links per recruitment method. This method would have allowed Qualtrics to account for how many and which participants came from each subject pool (social media, campus email, or gamer forum). This differentiation would have allowed further exploration of the demographics of each subject pool, if certain subject pools provided
significantly more participants, and how those factors might impact the results of their attitudes and perceptions of sexual harassment.

Future studies may consider Amazon Mechanical Turk (mTurk) as an alternative source for participants. mTurk is a website run by Amazon.com that provides a forum for those seeking workers and amasses a potential workforce. The website is divided into two groups, requesters and workers. Requesters post Human Intelligence Tasks (HITs), offering a set amount of money for the completion of each HIT (Amazon.com Inc., 2017). Workers set up an account through mTurk and then select HITs to complete for compensation. HITs come in a variety of topics and tasks such as language translation, audio transcription, image or product descriptions, and surveys, and requesters can even set specific qualifications in order to participate in some HITs (Amazon.com Inc., 2017). The potential for a large and easily accessible subject pool, ability to set certain participant criteria, and built in participant compensation system help to make mTurk appealing as a means of participant recruitment (Buhrmester, Kwang, & Gosling, 2011). In addition, mTurk has been shown to provide a more diverse and representative sample than convenience samples and samples recruited on American college campuses (Berinsky, Huber, & Lenz, 2012; Buhrmester, Kwang, & Gosling, 2011; Casler, Bickel, & Hackett, 2013). Finally, Casler, Bickel, and Hackett (2013) adapted a behavioral learning face-to-face task for online testing and found that participants recruited through mTurk replicated previous results and had results similar to participants recruited online through social media and college recruited in-person sample.

The study’s manner of examining participant gaming habits could also be improved. Participants were asked to select which game rating they predominantly played. However, as previously discussed, mature content can cover a range from sexual content and violence to
gambling and swearing. To more accurately measure what content gamers are interacting with, the question could be framed to ask about the specific content (based on the ESRB descriptors) the games they play with a Teen or above rating contain.

Another area that may benefit from more refined questioning is the modified SHDQ. Participants were asked to select how they would feel (from a list of adjectives) if the sexually harassing scenario happened to them. The adjective list was the same assembled by Foulis and McCabe (1997) and used with the original vignettes. It is understandable that Foulis and McCabe (1997) would want to include as many different negative emotions that the scenarios could provoke. However, out of the six adjectives, four were negative while there was only one neutral and one positive option. One option could be to adjust the number of adjectives in each category. However, since participants were allowed to select as many as they felt applied, there were potentially conflicting results (such as being both “unbothered” and “offended”). A solution may be to present the responses in the form of a Likert scale, ranging from a negative to positive emotional response, with neutral in the middle. Each category could give one or two example adjectives that would fall under each emotional category, such as “flattered” or “amused” for a positive emotional reaction.

While it was not an issue for this study, it would be important for future researchers to keep in mind that gaming and the internet have a global audience. It was surprising to realize that 18 of the participants were from countries outside of the United States. Future researchers could limit participation to individuals from specific countries (eg. United States and Canada) if there are concerns about language proficiency in English or cultural factors. However, since video games and interaction between gamers exist on the global platform of the internet, that may be unnecessary since these populations are already regularly interacting in a common language. It
may be beneficial to ask for nationality or ethnicity in addition to race as a demographic question, which would allow researchers to examine those factors more closely in a potentially international population.

Future researchers could expand the study of female gamers by further examining their relation to gender role orientation, gendered norms and traits, and sex stereotypes, and how those interact with their gaming habits and attitudes and perceptions of sexist behaviors. Foulis and McCabe (1997) found that participant scores of the Macho Scale (Villemez & Touhey, 1977 as cited by Foulis & McCabe, 1997), which measured beliefs of sex stereotyped behavior, was significantly related to sexual harassment attitudes for male and female participants. While Fox and Tang (2014) found that masculine norms and higher social dominance orientation significantly predicted higher video game sexism, and were significantly more predictive than age and sex. Given this information, future research about gamers should continue to examine different facets of the female gamer population. A scale such as the Bem Sex-Role Index (BSRI; Bem, 1981) that measures gender role orientation would be useful in obtaining a more detailed examination of female gamers and how their gender role orientation may interact with their gaming habits, attitudes, and even behaviors. While the current study stands by the decision to limit its examination of female gamers to their sex and not explore gender as an additional variable, that choice was still a limitation of the study.

Sexual harassment and other sexist behaviors are still issues facing the gaming community. These issues are acknowledged by members of the community and, through the internet, the discussion is open to the general public. Mulkerin’s (2017) article highlights the sexist and racist harassment of players of the multiplayer first-person shooter Overwatch since
the game’s release a year ago. As long as these issues persist it is reasonable to continue research in order to better understand and address them.
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Youth VGU score, Number of Gaming Devices, Current VGU score, Preferred Game Rating,
Single-player, Multiplayer, Genre (Action, Adventure Massively Multiplayer, Puzzle Role-
playing, Shooter, Simulation, Sports, Strategy, Survival Horror), and Community
Salience.............................................................................................................................38
Table 1.

Participant Demographic Information

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>114</td>
<td>27.04</td>
<td>7.78</td>
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<tr>
<td>Community Salience</td>
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<td>3.99</td>
<td>.94</td>
</tr>
<tr>
<td>Total Devices</td>
<td>113</td>
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<td>15.98</td>
</tr>
<tr>
<td>Rating</td>
<td>114</td>
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<td>1.01</td>
</tr>
<tr>
<td>Single-player</td>
<td>114</td>
<td>2.49</td>
<td>1.05</td>
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<tr>
<td>Multiplayer</td>
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<td>3.23</td>
<td>1.19</td>
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<tr>
<td>VGU Current</td>
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<td>1.22</td>
</tr>
<tr>
<td>VGU Youth</td>
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<td>10.86</td>
</tr>
<tr>
<td>LgSHAS</td>
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<td>1.57</td>
<td>.12</td>
</tr>
<tr>
<td>SHDQ</td>
<td>114</td>
<td>5.44</td>
<td>2.37</td>
</tr>
<tr>
<td>SHDQ Negative</td>
<td>114</td>
<td>9.25</td>
<td>1.17</td>
</tr>
<tr>
<td>SHDQ Neutral</td>
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<td>.79</td>
<td>1.06</td>
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<tr>
<td>SHDQ Positive</td>
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<td>.14</td>
<td>.53</td>
</tr>
<tr>
<td>Action</td>
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<td>3.82</td>
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</tr>
<tr>
<td>Adventure</td>
<td>114</td>
<td>4.50</td>
<td>.83</td>
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<td>Massively multiplayer</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Puzzle</td>
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<td>3.72</td>
<td>1.18</td>
</tr>
<tr>
<td>Role-playing</td>
<td>114</td>
<td>4.36</td>
<td>1.13</td>
</tr>
<tr>
<td>Shooter</td>
<td>114</td>
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<td>Simulation</td>
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</tr>
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</tr>
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<td>Strategy</td>
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<td>1.05</td>
</tr>
<tr>
<td>Survival horror</td>
<td>114</td>
<td>2.77</td>
<td>1.45</td>
</tr>
</tbody>
</table>

Note. In order to meet the assumptions of normality, the SHAS score underwent a log transformation. The original (SHAS) and transformed score (Lg SHAS) are both present. Items in italics are video game genres.
Table 2.

*Correlation Between Attitudes (SHAS scores) and Perceptions (SHDQ scores) of Sexual Harassment*

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>LgSHAS</th>
<th>SHDQ</th>
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<td>LgSHAS</td>
<td>1.57</td>
<td>.12</td>
<td>-.42***</td>
<td></td>
</tr>
<tr>
<td>SHDQ</td>
<td>5.44</td>
<td>2.37</td>
<td>-.42***</td>
<td></td>
</tr>
</tbody>
</table>

*Note.*

* *p < .05
** *p < .01
*** *p < .001
Table 3.

*Simple Linear Regression with Preferred Game Rating as a Predictor of Attitudes of Sexual Harassment (SHAS scores)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t</th>
<th>Sig. (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating</td>
<td>-0.18</td>
<td>.01</td>
<td>-.15</td>
<td>-1.62</td>
<td>.11</td>
</tr>
</tbody>
</table>

*Note. R^2 = .02*
Table 4.

**Significant Models Produced by Exploratory Stepwise Multiple Regression for the Output Variable Attitudes of Sexual Harassment (SHAS scores), where the Input Variables were Youth VGU score, Number of Gaming Devices, Current VGU score, Preferred Game Rating, Single-player, Multiplayer, Genre (Action, Adventure Massively Multiplayer, Puzzle Role-playing, Shooter, Simulation, Sports, Strategy, Survival Horror), and Community Salience.**

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Included</th>
<th>$B$</th>
<th>Std. Error</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Role-playing</td>
<td>-.03</td>
<td>.01</td>
<td>-.25**</td>
<td>-2.71</td>
<td>.06</td>
<td>.06</td>
<td>7.40</td>
</tr>
<tr>
<td>2</td>
<td>Role-playing</td>
<td>-.03</td>
<td>.01</td>
<td>-.26**</td>
<td>-2.85</td>
<td>.10</td>
<td>.03</td>
<td>5.88</td>
</tr>
<tr>
<td></td>
<td>Sports</td>
<td>.02</td>
<td>.01</td>
<td>.19*</td>
<td>2.04</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.*

*p < .05*

**p < .01*

***p < .001*
Figure Captions

Figure 1. Scatter plot of the Pearson’s correlation between attitudes (SHAS scores) and perceptions of sexual harassment (modified SHDQ scores)…………………………………………………40

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Figure 1. Scatter plot of the Pearson’s correlation between attitudes (LgSHAS scores) and perceptions (modified SHQD scores) of sexual harassment.
Figure 2. Bar graph of average sexual harassment attitudes (SHAS scores) across predominantly played video game rating.

*Figure 2.* Bar graph of average sexual harassment attitudes (SHAS scores) across predominantly played video game rating.
Figure 3. Bar graph of average sexual harassment attitudes (SHAS scores) across interest in video game genre. Only genres significant to the stepwise multiple regression model are included.
Figure 4. Bar graph of average sexual harassment attitudes (SHAS scores) across interest in video game genre. Genres significant to the stepwise multiple regression model (role-playing and sports) are compared to two non-significant genres (puzzle and simulation) of median interest to better display model comparison across all genres presented in study.
Appendix A

Participant Recruitment Materials

Recruitment Email Marietta College
Dear Marietta College,

Hello, my name is Michele and I am a psychology graduate student at Marietta College. For my Master’s Thesis, I am conducting a survey of women who play video/computer games. You must identify as a woman, be at least 18 years old, and be familiar with/play video games (console, online, computer, app, etc.) to participate.

All participants are eligible to be entered for the chance to win a $25 Amazon gift card. Since the survey is anonymous and your answers are confidential, your email address will be kept separate from your survey responses.

The survey should take about 30 minutes to complete and can be taken on your computer or cell phone. It is best to complete the survey in one sitting. Your answers are saved upon completion and will not save if you leave the survey and attempt to return to finish.

Due to the copyrighted nature of materials used in the survey, I cannot directly post a link without it being password protected. Those wishing to participate can email me at mde002@marietta.edu, in order to obtain the survey password.

Thank you for your interest. Below is the link to the survey.
[LINK]

Recruitment Email Special Interest Clubs (Outside Marietta)
Dear [contact, usually the President or Public Relations chair of the organization]:

Hello, my name is Michele and I am a psychology graduate student at Marietta College. I am interested in research about video games and the gaming community. Due to your organization’s interest in video/computer games, I would like ask if you could forward this email to your mailing list. Your help would be greatly appreciated.

For my Master’s Thesis, I am conducting a survey of women who play video/computer games. To participate individuals must identify as a woman, be at least 18 years old, and be familiar with or play video games (console, online, computer, app, etc.).

All participants are eligible to be entered for the chance to win a $25 Amazon gift card. Since the survey is anonymous and your answers are confidential, your email address will be kept separate from your survey responses.

The survey should take about 30 minutes to complete and can be taken on your computer or cell phone. It is best to complete the survey in one sitting. Your answers are saved upon completion and will not save if you leave the survey and attempt to return to finish.
Due to the copyrighted nature of materials used in the survey, I cannot directly post a link without it being password protected. Those wishing to participate can email me at mde002@marietta.edu, in order to obtain the survey password.

Thank you for your interest. Below is the link to the survey.
[LINK]

**Recruitment Post for Forums and Other Social Media Sites**
Hello, my name is Michele and I am a psychology graduate student at Marietta College. For my Master’s Thesis, I am conducting a survey of women who play video/computer games. You must identify as a woman, be at least 18 years old, and be familiar with/play video games (console, online, computer, app, etc.) to participate.

All participants are eligible to be entered for the chance to win a $25 Amazon gift card. Since the survey is anonymous and your answers are confidential, your email address will be kept separate from your survey responses.

The survey should take about 30 minutes to complete and can be taken on your computer or cell phone. It is best to complete the survey in one sitting. Your answers are saved upon completion and will not save if you leave the survey and attempt to return to finish.

Due to the copyrighted nature of materials used in the survey, I cannot post a link directly in an open forum without it being password protected. Those wishing to participate can email me at mde002@marietta.edu, or private message me, in order to obtain the survey password.

**Survey Password Email/Private Message (Directly to Participant)**
Thank you for expressing interest in my study.

Remember: The survey should take 30 minutes to complete and can be taken on your computer or cell phone. It is best to complete the survey in one sitting. Your answers are saved upon completion and will not save if you leave the survey and attempt to return to finish. Below is the password to the survey.

[Password]
Appendix B
Informed Consent

**Project Title:** Examining Female Gamers’ Perceptions and Attitudes of Behaviors in the Gaming Community
**Researcher:** Michele Evanson
**Advising Faculty:** Dr. Barnas

**Study Purpose**
This study will be examining female video game players’ attitudes towards and perceptions of behaviors they may encounter while gaming. Questions ask about usage of video games and social media, and potentially harassing behaviors that might be encountered on those platforms.

**Length and Content**
The study should take approximately 30 minutes to complete, and will include a series of surveys about demographic information, video game usage, and attitudes regarding potentially sensitive topics of a sexual nature.

_In order to participate you must be at least 18 years old, female, and play video games (console, online, computer, app, etc.)._

**Risks and Benefits**
The Marietta College Human Subjects Committee has approved the current study. This study is completely voluntary. If you feel uncomfortable at any time during the study, you may choose to stop and withdraw from the study without fear of consequences. Simply exit Qualtrics and do not complete the survey.

The risk of participating in this study is that you will be asked questions that feature in text examples of sexual or explicit language that may be upsetting or offensive to you.

*Based on the risks of the study, it is strongly recommended that individuals who have experienced trauma of a sexual nature do not participate in the study.*

Finally, participants who wish to enter the drawing for the $25.00 Amazon gift card must provide their email address. Email addresses will be not be associated with the data.

**Participant Privacy**
The researcher will make every effort to ensure your confidentiality. All data entered into Qualtrics will be password protected, with only the researcher and the faculty advisor having access to your data. Your name and will not be associated with data collected. All data will be used for research purposes only. You will have the option to provide your email address for a chance to be entered into a drawing for a $25.00 Amazon gift card. But your email address will not be attached to your data. All data will be deleted five years after research completion.

**Participant Agreement**
By checking the box on this form you agree that you have read the above information and that you agree to participate in the research study. For any questions about the study you may contact
Michele Evanson, (mde002@marietta.edu; 234-205-0963) or Dr. Barnas (barnasm@marietta.edu; 740-376-4766). The Chair of the Human Subjects Committee, Jaclyn Schwieterman (sj004@marietta.edu; 740-376-4773), also is available if you have any questions regarding participant rights.

Approved by Marietta College HSC
Protocol 10172016-1
Date Approved 10/17/2016
Date Expires 10/17/2017

☐ I have read and agree to these terms.
Appendix C

Demographics Questionnaire

For the following questions, select or input the answer that most accurately describes you.

1. Enter your age (in numbers)
   
   ______

2. Sex:
   - Male
   - Female
   - Transgender
     If you selected Transgender, how do you identify?
       - Man
       - Woman
       - Other

3. Race:
   - Asian
   - Black/African American
   - Hispanic/Latino
   - Multiracial
   - White
   - Other

4. On average, how many hours do you spend on social media in a week?
   0-1 2-5 6-10 11-15 more than 15
   □   □   □   □   □

5. Of your time spent on social media, how often do you use the following?

<table>
<thead>
<tr>
<th>Never</th>
<th>Sometimes</th>
<th>About half the time</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Twitter</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Instagram</td>
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<td>Tumblr</td>
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</tr>
<tr>
<td>Other</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

6. Do you play video games (console, online, computer, app, etc.)?
   - Yes
   - No
7. For each type of gaming device, slide to indicate how many that you own or use in your household (even if the value is zero, you must tap/click the circle and select 0)

[Number indicated by position appears above slider]

- **Console**
  - 0

- **Handheld/potable game console**
  - 0

- **Computer (that you use for gaming)**
  - 0

- **Phone/tablet/app using device (that you use for gaming)**
  - 0

- **Online gaming account**
  - 0

- **Arcade cabinet**
  - 0

- **Other**
  - 0

8. When you play a video game (console, online, computer, app, etc.), how often is it

**single player**
- Never
- Sometimes
- About half the time
- Most of the time
- Always

**multiplayer (online or in person)**
- Never
- Sometimes
- About half the time
- Most of the time
- Always
9. Rate your interest for each gaming genre

<table>
<thead>
<tr>
<th>Genre</th>
<th>Not at all interested</th>
<th>Not really</th>
<th>Neutral</th>
<th>Somewhat</th>
<th>Very much interested</th>
</tr>
</thead>
<tbody>
<tr>
<td>action</td>
<td>□</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>adventure</td>
<td>□</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>role-playing</td>
<td>□</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>sports</td>
<td>□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>shooter</td>
<td>□</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>simulation</td>
<td>□</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>puzzle</td>
<td>□</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>strategy</td>
<td>□</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>survival horror</td>
<td>□</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>massively multiplayer</td>
<td>□</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

10. Which rating do the majority of the games you play fall under?
- □ everyone
- □ everyone 10+
- □ teen
- □ mature 17+
- □ adults only 18+

11. Do you see yourself as a “gamer” or part of the video gaming community?

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
</tbody>
</table>
Appendix D

**Video Game Usage Scale**
Modified from the Lifetime Television Exposure Scale (Riddle, 2010)

Current video game usage:
I would like you think about your current levels of playing video games. In other words, think of your lifestyle over the past year or so. Based on this current lifestyle, think about your video game playing habits when answering the following questions. For each question, please select a number from 1 (Never) to 7 (Almost Always).

How often do you play video games (console, online, computer, app, etc.)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Sometimes</th>
<th>Almost always</th>
</tr>
</thead>
<tbody>
<tr>
<td>when you first wake up in the morning?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>during lunchtime?</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>in the afternoon?</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>during dinnertime?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>after dinner?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>late at night, before going to bed?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>during the day on Saturday?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>on Saturday nights?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the day on Sunday?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>on Sunday nights?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Youth video game usage:
I would now like you to think back to your adolescence and childhood. In other words, think of the lifestyle you experienced in your youth (17 and under). Based on that lifestyle, think about your video game playing habits when answering the following questions. For each question, please select a number from 1 (Never) to 7 (Almost Always).

During your youth, how often did you play video games (console, online, computer, app, etc.)

<table>
<thead>
<tr>
<th>Time</th>
<th>Never</th>
<th>Sometimes</th>
<th>Almost always</th>
</tr>
</thead>
<tbody>
<tr>
<td>when you first woke up in the morning?</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>during lunchtime?</td>
<td>□</td>
<td>□</td>
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<tr>
<td>in the afternoon?</td>
<td>□</td>
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<tr>
<td>during dinnertime?</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<tr>
<td>after dinner?</td>
<td>□</td>
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<td>□</td>
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<tr>
<td>late at night, before going to bed?</td>
<td>□</td>
<td>□</td>
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<tr>
<td>during the day on Saturday?</td>
<td>□</td>
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<tr>
<td>on Saturday nights?</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>the day on Sunday?</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>on Sunday nights?</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Appendix E

Sexual Harassment Attitude Scale
*Item is reverse scored.

Select the answer that best reflects your response to each statement.

1. An attractive women has to expect sexual advances and should learn how to handle them.


2. Most men are sexually teased by many of the women with whom they interact on the job or at school.


3. Most women who are sexually insulted by a man provoke his behavior by the way they talk, act, or dress.


4. * A man must learn to understand that a woman's "no" to his sexual advances really means "no."


5. It is only natural for a woman to use her sexuality as a way of getting ahead in school or at work.


6. An attractive man has to expect sexual advances and should learn how to handle them.


7. * I believe that sexual intimidation is a serious social problem.

8. It is only natural for a man to make sexual advances to a woman he finds attractive.

1  Strongly Disagree  2  Disagree  3  Undecided  4  Agree  5  Strongly Agree

9. Innocent flirtations make the workday or school day interesting.

1  Strongly Disagree  2  Disagree  3  Undecided  4  Agree  5  Strongly Agree

10. Encouraging a professor's or a supervisor's sexual interest is frequently used by women to get better grades or to improve their work situations

1  Strongly Disagree  2  Disagree  3  Undecided  4  Agree  5  Strongly Agree

11. One of the problems with sexual harassment is that some women can't take a joke.

1  Strongly Disagree  2  Disagree  3  Undecided  4  Agree  5  Strongly Agree

12. The notion that what a professor does in class may be sexual harassment is taking the idea of sexual harassment too far.

1  Strongly Disagree  2  Disagree  3  Undecided  4  Agree  5  Strongly Agree

13. Many charges of sexual harassment are frivolous and vindictive.

1  Strongly Disagree  2  Disagree  3  Undecided  4  Agree  5  Strongly Agree


1  Strongly Disagree  2  Disagree  3  Undecided  4  Agree  5  Strongly Agree

15. Sexual assault and sexual harassment are two completely different things.

1  Strongly Disagree  2  Disagree  3  Undecided  4  Agree  5  Strongly Agree
16. Sexual harassment refers to those incidents of unwanted sexual attention that aren't too serious.

1
Strongly Disagree  2  Disagree  3  Undecided  4  Agree  5  Strongly Agree

17. Sexual harassment has little to do with power.

1
Strongly Disagree  2  Disagree  3  Undecided  4  Agree  5  Strongly Agree

18. Sexism and sexual harassment are two completely different things.

1
Strongly Disagree  2  Disagree  3  Undecided  4  Agree  5  Strongly Agree

19. All this concern about sexual harassment makes it harder for men and women to have normal relationships.

1
Strongly Disagree  2  Disagree  3  Undecided  4  Agree  5  Strongly Agree
Appendix F

Sexual Harassment Vignettes

Based on the Sexual Harassment Definitions Questionnaire by Foulis & McCabe (1997)

Instructions
Please read the following descriptions of behaviors and select the answers that best represent your opinion.
(You may check more than one box if you feel that this is necessary.)

1. You are discussing an upcoming video game on Twitter when someone replies, “Aw that’s cute. You trying to impress a guy or something? Go back to Farmville and let the guys talk.”

Would you be:
☐ flattered  ☐ offended  ☐ upset  ☐ angry  ☐ annoyed  ☐ not bothered

Would you define this incident as sexual harassment?
☐ Yes  ☐ No

2. You leave a comment criticizing the game mechanics of a newly released game in a discussion thread on developer’s Facebook page. Someone you’ve never interacted with before disagrees and ends the reply by telling you to “Go back to the kitchen and make me a sandwich.”

Would you be:
☐ flattered  ☐ offended  ☐ upset  ☐ angry  ☐ annoyed  ☐ not bothered

Would you define this incident as sexual harassment?
☐ Yes  ☐ No
3. You share an article discussing the social criticisms surrounding a recently released game on your blog. Someone replies to the post, “You’re probably a fat nerd. Bet you’re too ugly to get a boyfriend.”

Would you be:

☐ flattered ☐ offended ☐ upset ☐ angry ☐ annoyed ☐ not bothered

Would you define this incident as sexual harassment?

☐ Yes ☐ No

4. You are playing a video game online against other players, when an unfamiliar player says, “You sound hot” and requests that you moan into your microphone for them.

Would you be:

☐ flattered ☐ offended ☐ upset ☐ angry ☐ annoyed ☐ not bothered

Would you define this incident as sexual harassment?

☐ Yes ☐ No

5. Someone leaves a message on your console gamer profile asking, “You a girl? Can I see your tits?”

Would you be:

☐ flattered ☐ offended ☐ upset ☐ angry ☐ annoyed ☐ not bothered

Would you define this incident as sexual harassment?

☐ Yes ☐ No
6. While playing a game online, someone uses the in-game messaging feature to ask “Want to webchat? I’ll pay for nudes.”

Would you be:

☐ flattered  ☐ offended  ☐ upset  ☐ angry  ☐ annoyed  ☐ not bothered

Would you define this incident as sexual harassment?

☐ Yes  ☐ No

7. You are in an online forum for an upcoming video game convention and comment about how excited you are for a particular panel at the event. Someone replies “Want to meet up and screw?”

Would you be:

☐ flattered  ☐ offended  ☐ upset  ☐ angry  ☐ annoyed  ☐ not bothered

Would you define this incident as sexual harassment?

☐ Yes  ☐ No

8. During an online multiplayer game an opponent repeatedly singles you out and calls you a “Bitch,” and a “Slut.”

Would you be:

☐ flattered  ☐ offended  ☐ upset  ☐ angry  ☐ annoyed  ☐ not bothered

Would you define this incident as sexual harassment?

☐ Yes  ☐ No
9. After an online match ends in your team’s defeat, one of your opponents sends you a message saying, “Wow we really raped your team.”

Would you be:

☐ flattered  ☐ offended  ☐ upset  ☐ angry  ☐ annoyed  ☐ not bothered

Would you define this incident as sexual harassment?

☐ Yes  ☐ No

10. During a tournament at a local game shop, an opponent repeatedly yells, “Suck my dick!” when you start to take the lead in the match.

Would you be:

☐ flattered  ☐ offended  ☐ upset  ☐ angry  ☐ annoyed  ☐ not bothered

Would you define this incident as sexual harassment?

☐ Yes  ☐ No
Appendix G
Email and Survey Completion Pages

If you would like to be entered in the drawing for a $25 Amazon gift card please submit your email below. (Your email will be kept separate from your survey data.)
[Space for email]

Would you like to be emailed the results of the survey? (Your email will be kept separate from your survey data.)
☐ Yes ☐ No

[Also the page that rejected participants (those who select “male” or “less than 18”) are automatically sent to]

Thank you for your participation in this survey.

Should you have any other questions, please do not hesitate to contact Michele Evanson, (mde002@marietta.edu; 234-205-0963) or Dr. Barnas (barnasm@marietta.edu; 740-376-4766). You can contact the Chair of the Human Subjects Committee of Marietta College, Jaclyn Schwieterman (sj004@marietta.edu; 740-376-4773) for information or questions on participant rights.

We request that you keep the purpose of our research experiment in addition to your experience in the study private. This will ensure the data we collect will not be contaminated by discussion among participants.

If you feel it necessary, remember that you can reach out to your campus counseling center (if you are a student) or one of the mental health crisis lines available nationally https://www.mentalhealth.gov/get-help/immediate-help/.