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Lgbtq+ Experiences In Online Gaming Communities

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ABSTRACT

Online video game communities can often provide a sense of community and support for marginalized people; at the same time, however, they are frequently rife with bigotry and prejudice. LGBTQ+ people who play online video games may witness or experience insults, threats, or degrading comments. Researchers still have not learned the prevalence or types of discrimination LGBTQ+ people face in online gaming communities. This study aimed to learn the prevalence of both positive and negative attitudes towards sexual orientation and gender identity in the form of jokes, offhand comments, or serious discussion. An online survey, consisting of 26 questions, was distributed on social media sites (Facebook, Reddit, Tumblr, and Twitter) and the Penn State subject pool. The survey asked questions, both open-ended and measured on a Likert scale, on video game usage and experiences regarding conversations about LGBTQ+ people and issues. The final four questions were demographic questions, categorizing participants by age, gender, sexual orientation, and race/ethnicity. This survey tested the hypothesis that LGBTQ+ people witness or experience more discrimination than heterosexual and cisgender people do.

The results of the survey indicated that non-heterosexual individuals are more likely to notice comments about sexual orientation or gender identity during online gameplay than are their heterosexual coplayers. Results also suggested that non-heterosexual players are more likely to make positive comments or mention sexual orientation and gender identity in serious discussion, whereas heterosexual men were the least likely to make positive comments. The majority of participants reported having heard negative comments about sexual orientation and gender identity from other players.

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Chapter 1

Introduction

Many people enjoy playing video games. In their 2018 report, “Essential Facts About the Computer and Video Games Industry”, the Entertainment Software Association states that 64% of households in the United States own a gaming console or device, and 60% of Americans play video games daily, creating a \$36 billion industry in 2017. Of these players, 45% are women, and the average age is 34 years (ESA, 2018). With subjects ranging from working on a farm (*Harvest Moon*, *Stardew Valley*) to competitive sports (*Madden NFL*, assorted *Mario* spinoff games) to fighting monsters (*Pokémon*, *Monster Hunter*) and beyond, there is a corner of the market for almost anyone. One especially prominent subcategory of video game is those played online with real people around the world; according to a study by Kowert, Festl, and Quandt (2014), 35.12% of people living in Germany play online multiplayer games, compared to 45.28% that exclusively play offline and only 19.6% that don’t play any video games at all. With this online community, however, comes a certain degree of anonymity.

This anonymity can be used to build a safe online community, as described by Jenny Sundén in “Play as Transgression: An Ethnographic Approach to Queer Game Cultures” (2009). Sundén, a member of an LGBTQ+ guild in popular massively multiplayer online game (MMOG) *World of Warcraft*, likened joining this LGBTQ+ space to coming home: “Sharing a passion for games, as well as sharing experiences of moving through life, and through the game as non-straight, forms a clear sense of togetherness and belonging” (p. 4). According to Sundén, playing the game was “like traveling with your lover to places where public handholding and kissing is difficult” (p. 4), whereas finding this one small community was finding “a gay/lesbian bar where

you can stop pretending” (p. 4). It is not uncommon for LGBTQ+ people who play video games to build their own safe corners like this – sometimes, it is necessary.

Although many people find comfort in the anonymity of online gaming, others take advantage of it to hurt others. In 2014, an online movement that became known as “Gamergate” emerged in protest of the increasing diversity in video games and the involvement of women in the industry (Braithwaite, 2016). Some of these protests took the form of violently misogynistic campaigns against prominent women in gaming and media, such as game developers Zoe Quinn and critic Anita Sarkeesian (Salter, 2017). These campaigns included “rape and death threats, doxing (gathering and releasing personal information online) and SWATing (sending false tips to the police to trigger a raid on someone’s home address)” (Salter, 2017). Sarkeesian had her face edited onto pornographic images and was forced to leave her home after someone with her address threatened to kill her (Parkin, 2014). Sarkeesian also received an anonymous bomb threat when she was scheduled to speak at Utah State University, where the anonymous writer of the email promised “the deadliest school shooting in American history” (Gray, Buyukozturk, & Hill, 2017). Even years after the most active period of Gamergate, the women targeted live in a state of “hyper-vigilance, heightened security at public appearances and ongoing threats” (Salter, 2017). On the topic of the root causes of Gamergate, Salter (2017) says that “the encoding of... gender norms into online platforms has given these misogynist strands of geek culture a position of technological hegemony” (p. 248).

This hegemony can then be extended to other marginalized groups as well; in 2013, Alexis Pulos wrote about heteronormativity in *World of Warcraft*, criticizing the tendency of Blizzard, the game developer, to regulate sexuality and sexual expression within their game. Pulos cites WoW forum posts in which users claim that sexual orientation has no place in the community. Other users dismissed the use of homophobic and transphobic slurs as “gamer lingo” (Pulos, 2013). These justifications of discrimination, Pulos claims, paint the WoW community as

a whole as intolerant and prejudiced, creating an uncomfortable or even unsafe environment for LGBTQ+ players.

Sundén and Pulos highlight two very different sides of the same coin. However, both authors wrote their pieces from their own personal observations in online gaming. As such, data on the exact prevalence and nature of these occurrences has yet to be collected. Searches on PsycINFO, Google Scholar, and the Penn State library databases were conducted using relevant keywords such as ‘homophobia’, ‘transphobia’, ‘video games’, and ‘online gaming’, but yielded no English-language results on the subject.

This current study will aim to assess the frequency of both positive and negative comments regarding LGBTQ+ people and issues. Further, demographic data will be used to assess if LGBTQ+ individuals are more likely to take note of such comments in comparison with their cisgender and heterosexual co-players.

Chapter 2

Methods

Participants

Participants were recruited through social media postings and the Cross-Campus Psychology Subject Pool. In order to be included, potential participants had to be 18 years of age or older and must have played an online video game in the last six months. Individuals recruited through social media were not compensated for their participation; those recruited through the subject pool were able to receive course credit.

A total of 493 individuals entered the study. The Penn State subject pool brought in 30 individuals; of those 30 individuals, 2 agreed to participate but did not answer any questions, and thus were not included in the final participant count. Social media links brought in 463 individuals; of those individuals, one declined to participate on the consent page, 2 did not answer the request for consent, one answered the first set of questions before exiting the survey, and 231 agreed to participate but did not answer any of the questions. These 235 individuals were not included in the final participant count. In the end, 28 (10.9%) participants came from the subject pool and 228 (89.1%) came from a social media link, for a total of 256 participants.

All 256 participants completed some or all of the survey. Twenty-three (9%) completed 29% of the survey; twenty-four (9.4%) completed 46% of the survey; eight (3.1%) completed 64% of the survey; four (1.6%) completed 82% of the survey; and 197 (77%) completed 100% of the survey.

Over one-third of participants were between the ages of 18 and 24, with 96 (37.5%) responses. In the other age groups, 35 (13.7%) were between the ages of 25 and 30; 44 (17.2%)

were between the ages of 31-40; 17 (6.6%) participants were between the ages of 41 and 40; and three (1.2%) participants were older than 50 years of age. The remaining 61 (23.8%) participants did not report their age.

The majority of the participants were white, with 154 (60.15%) identifying as such. Of the remaining participants, five (1.95%) were black; ten (3.91%) were Asian; six (2.34%) were Hispanic/Latinx; fourteen (5.47%) were multiracial; and one (0.39%) was indigenous Canadian. Approximately one-quarter of participants did not report their race or ethnicity, with 66 (25.78%) leaving that question blank.

Approximately one third of participants identified as heterosexual, with 84 (32.81%) participants reporting their sexual orientation as such. Of the remaining participants, 34 (13.28%) identified as bisexual; 19 (7.42%) identified as pansexual; 18 (7.03%) identified as gay; 13 (5.08%) identified as asexual; 11 (4.3%) identified as lesbians; and 7 (2.73%) identified as queer. One (0.39%) participant reported their sexual orientation as “questioning” and one (0.39%) reported their sexual orientation as bisexual/lesbian. Three (1.17%) participants reported their sexual orientation as “female”. See Appendix A for the exact breakdown of participant sexual orientation.

A total of 100 (39.06%) participants were men and 65 (25.39%) were women. Another 28 (10.94%) participants were nonbinary. See Appendix A for the exact breakdown of participant gender.

The 185 participants who reported both sexual orientation and gender identity were divided into five distinct groups for data analysis. The “non-heterosexual men” group included 43 cisgender and transgender men who identified as any non-heterosexual identity or who exhibited any uncertainty about their sexual orientation. The “non-heterosexual women” group included 37 cisgender and transgender women who met the same criteria. The “nonbinary” group consisted of 25 people who identified as any gender identity that did not fit the man-woman

binary or who expressed uncertainty about whether or not they identified with a binary gender. All 25 nonbinary participants were also non-heterosexual. The “heterosexual men” group included 55 cisgender and transgender men who identified as heterosexual with no indication that they may be questioning or uncertain about their sexual orientation. The “heterosexual women” group included 25 cisgender and transgender women who met the same criteria.

Materials

Data was collected via a survey hosted on Qualtrics. The survey consisted of approximately 26 questions and data is both qualitative and measured on a 5-point Likert scale. Questions addressed online video game usage within the last six months and asked participants to report the frequency and valence of any jokes, offhand comments, or serious discussion points about sexual orientation and gender identity they may have heard from other players. Participants were also asked the same questions about their own online behavior. The last four questions of the survey were demographic questions, asking the participant’s race/ethnicity, age, gender, and sexual orientation. Appendix B contains the complete questionnaire.

Procedure

Solicitation of participants occurred on two tracks following IRB approval. Current Penn State students were approached through the Cross-Campus Psychology Subject Pool. Additional participants were approached through social media postings, as permitted by the websites. After consent was obtained, participants were asked to complete the 26-question survey. Upon completion of the survey, all participants were thanked for their time and provided with a link to a 24-hour LGBTQ+ hotline should they need it.

Data was collected over a period of seven weeks. The survey went live on the Penn State subject pool and social media (Facebook, Tumblr, and Twitter) on January 23rd, 2019, and on Reddit on January 30th, 2019. The link to the survey was reposted on Tumblr and Reddit on February 13th, 2019. Both versions of the survey were closed on Qualtrics on March 13th, 2019.

Coding of open-ended responses

Answers to the eight open-ended questions were sorted into different categories depending on their content. Responses to the four questions requesting examples of positive jokes, comments, or discussions fell into one of two groups (1 = positive, 6 = not positive, irrelevant, or none). Responses to the four questions requesting examples of negative jokes, comments, or discussions fell into one of two groups (1 = negative, 6 = none). The two questions requesting examples of negative things said by the respondent had a third category (3 = negative towards cisgender/heterosexual identities). Comments were rated by two persons and reached acceptable levels of agreement according to Krippendorff's alpha.

Comments that were considered positive included accepting the sexual orientation or gender identity of others, standing up to other players spreading negative comments, LGBTQ+ players connecting with each other, or educating/seeking education on LGBTQ+ topics. Negative comments included insults, threats, slurs, general wishes of harm, and invalidation of identity.

Chapter 3

Results

Descriptive information

Video games played were grouped together according to series and style of gameplay. The most popular game played was *Overwatch*, with 75 different participants reporting having played it within the past six months. Other popular games were *Fortnite* (29 players), *World of Warcraft* (29 players), the *Call of Duty* franchise (25 players), and *League of Legends* (21 players). See Appendix C for the full list of video games.

Frequency of interaction with other players did not seem to vary across the five identity groups. A one-way between-groups ANOVA done on the ratings showed no statistically significant differences among the group means, $F(4,180) = 0.68, p = 0.607$. The mean frequency of interaction with other players during online gameplay is shown in Table 3-1.

	N	Mean	Std. Deviation
Non-het. men	43	2.3	1.301
Non-het. women	38	2.22	1.417
Nonbinary	25	2.6	1.08
Het. men	55	2.58	1.41
Het. women	25	2.28	1.308

Table 3-1. Mean frequency of interaction with other players during online gameplay.

See Appendix D for all of the rating scale items.

Types of comments

The participants were asked to rate the frequency during game play of jokes, offhand comments, and serious discussions that related to sexual orientation and to gender identity. Each

set of ratings was done for others and for self. Participants were also asked to provide examples.

The average ratings by participant identity group on the rating scales for others and for self for each comment type are shown in Table 3-2.

	Non-het. men	Non-het women	Nonbinary people	Het. men	Het. women
SO Comments					
Self					
Jokes	1.29 (1.431)	1.25 (1.191)	1.00 (1.087)	0.62 (0.993)	0.35 (0.573)
Offhand	0.87 (1.119)	1.22 (1.157)	0.87 (1.014)	0.48 (0.939)	0.39 (0.583)
Serious	1.03 (1.15)	1.44 (1.243)	1.13 (1.29)	0.54 (0.753)	0.52 (0.79)
Other					
Jokes	2.37 (1.282)	2.19 (1.306)	2.09 (1.203)	1.67 (1.248)	2.09 (1.203)
Offhand	2.26 (1.005)	1.47 (0.983)	1.96 (0.976)	1.42 (1.273)	1.48 (1.238)
Serious	0.76 (0.786)	0.72 (0.888)	0.65 (0.832)	0.62 (1.032)	0.57 (0.843)
GI Comments					
Self					
Jokes	0.29 (0.694)	0.53 (1.047)	0.48 (0.79)	0.27 (0.564)	0.09 (0.228)
Offhand	0.26 (0.554)	0.69 (1.061)	0.78 (0.951)	0.27 (0.598)	0.09 (0.288)
Serious	0.68 (1.165)	0.97 (1.177)	1.17 (1.337)	0.46 (0.641)	0.04 (0.209)
Other					
Jokes	1.37 (1.261)	1.47 (1.391)	1.3 (1.259)	0.69 (0.919)	1.17 (1.154)
Offhand	1.13 (1.143)	0.88 (0.871)	1.09 (1.203)	0.56 (0.826)	1.09 (1.164)
Serious	0.45 (0.555)	0.44 (0.84)	0.48 (0.79)	0.33 (0.734)	0.52 (0.898)

Table 3-2. Mean frequency and standard deviation of jokes, offhand comments, and serious discussion points by self and others.

An Identity Group (5: non-heterosexual men, non-heterosexual women, nonbinary people, heterosexual men, heterosexual women) X Content (2: sexual orientation, gender identity)

X Actor (2: self, other) X Comment Type (3: jokes, offhand, serious) ANOVA was done on the ratings.

There was an interaction of Actor, Comment Type, and Identity Group, $F(2, 163) = 2.72$, $p = 0.006$. Non-heterosexual women made more offhand comments and serious discussion points than heterosexual men and women, and more jokes than heterosexual women.

Valence of comments

The participants were asked to rate the frequency during game play of positive comments and negative comments that related to sexual orientation and to gender identity. Each set of ratings was done for others and for self. Participants were also asked to provide examples. The average ratings by participant identity group on the rating scales for others and for self for positive and negative valences are shown in Table 3-3.

	Non-het. men	Non-het. women	Nonbinary people	Het. men	Het. women
SO Valence					
Self					
Positive	1.45 (0.783)	1 (0.403)	1.26 (0.689)	1.2 (1.08)	1.28 (0.936)
Negative	0.38 (0.868)	0.21 (0.413)	0.04 (0.209)	0.61 (1.204)	0.6 (1.225)
Others					
Positive	1.35 (1.193)	1.26 (1.155)	1.26 (1.137)	1.26 (1.259)	1.2 (0.957)
Negative	2.53 (2.26)	2.55 (1.329)	2.52 (1.442)	2.28 (1.457)	2.44 (1.227)
GI Valence					
Self					
Positive	2.8 (1.698)	3.55 (1.132)	3.09 (1.593)	2.18 (1.776)	3.4 (1.041)
Negative	0.28 (0.784)	0.21 (0.664)	0.22 (0.736)	0.63 (1.236)	0.36 (0.907)
Others					

Positive	0.93 (1.203)	1.03 (1.325)	0.74 (1.176)	0.94 (1.284)	1.4 (1.19)
Negative	2.12 (1.562)	2.55 (1.554)	2.48 (1.62)	1.86 (1.604)	2.28 (1.429)

Table 3-3. Mean valence and standard deviation of comments about sexual orientation and gender identity by self and others.

An Identity Group (5: non-heterosexual men, non-heterosexual women, non-binary people, heterosexual men, heterosexual women) X Content (2: sexual orientation, gender identity) X Actor (2: self, other) X Valence (2: positive, negative) ANOVA was done on the ratings.

Question 10 in the survey asked for examples of positive things said by other players about sexual orientation. Analysis of the open-ended responses revealed a significant association between identity group and comments, $\chi^2 = (4, N = 131) = 25.1, p < 0.01$. Between the five identity groups, only 60 out of 131 responses to requests for positive examples said by other players were truly positive. In the remaining 71 responses, participants either provided an example that was negative or reported that they had no positive experiences to share. Non-heterosexual men and non-heterosexual women both reported hearing more positive comments than not, while nonbinary participants were evenly divided between having heard positive comments and not having heard positive comments. Heterosexual men and heterosexual women reported not having heard any relevant comments more often than having heard positive comments about sexual orientation. See Table 3-4 for the exact breakdown of positive sexual orientation comments by others.

When asked about negative comments made by other players regarding sexual orientation (Question 20 in the survey), 133 out of 149 participants were able to provide an example. All 133 examples involved negative commentary about LGBTQ+ identities. Because of the overwhelming frequency of these negative comments, there were no significant differences between identity groups. See Table 3-4 for the exact breakdown of negative sexual orientation comments by others.

The majority of responses (76/113) reported that other players did not make positive comments about gender identity. This was consistent across all five identity groups. The same majority (76/113) also reported hearing other players make negative comments about gender identity, with no significant difference between identity groups. See Table 3-4 for the exact breakdown of positive and negative gender identity comments by others.

	Non-het. men	Non-het. women	Nonbinary people	Het. men	Het. women
SO					
Positive					
1 Pos.	18 (13.3)	21 (13.3)	8 (7.8)	6 (16.9)	7 (8.7)
6 None	11 (15.7)	8 (15.7)	9 (9.2)	31 (20.1)	12 (10.3)
Negative					
1 Neg.	35 (32.1)	29 (28.6)	16 (16.1)	34 (37.5)	19 (18.7)
6 None	1 (3.9)	3 (3.4)	2 (1.9)	8 (4.5)	2 (2.3)
GI					
Positive					
1 Pos.	6 (6.8)	9 (6.8)	3 (2.7)	3 (7.3)	6 (3.5)
6 None	19 (18.3)	16 (18.3)	7 (7.3)	24 (19.7)	7 (9.5)
Negative					
1 Neg.	17 (16.8)	22 (18.8)	13 (10.1)	15 (20.8)	9 (9.4)
6 None	8 (8.2)	6 (9.2)	2 (4.9)	16 (10.2)	5 (4.6)

Table 3-4. Number of positive and negative comments by others (expected values in parentheses).

Question 20 of the survey asked participants to describe positive things they themselves have said about sexual orientation during online gameplay. Analysis of the open-ended responses indicated a significant association between identity group and comments, $\chi^2 = (4, N = 131) = 14.7, p = 0.005$. Both non-heterosexual women and nonbinary people reported making more positive comments than not, while non-heterosexual men and heterosexual men reported not

making positive comments more often than making them. Heterosexual women were evenly divided between making positive comments and not making them. See Table 3-5 for the exact breakdown of positive sexual orientation comments by self.

The majority of participants (73/100) reported that they did not make negative comments about sexual orientation during online gameplay. However, there was also a significant association between identity group and comments, $\chi^2 (8, N = 102) = 17.7, p = 0.02$. Heterosexual men made the most negative comments about sexual orientation, while non-heterosexual men made negative comments about both heterosexual and non-heterosexual identities. See Table 3-5 for the exact breakdown of negative sexual orientation comments by self.

The number of participants that reported making positive comments about gender identity (54/107) was similar to the number that reported not making positive comments about gender identity (53/107). There was no significant difference between identity groups. See Table 3-5 for the exact breakdown of positive gender comments by self.

The majority of answers (74/84) reported not making negative comments about gender identity. See Table 3-5 for the exact breakdown of negative gender comments by self.

	Non-het. men	Non-het. women	Nonbinary people	Het. men	Het. women
SO					
Positive					
1 Pos.	13 (16.4)	24 (16.9)	11 (7.9)	16 (21.5)	10 (11.3)
6 None	16 (12.6)	6 (13.1)	3 (6.1)	22 (16.5)	10 (8.7)
Negative					
1 Neg.	6 (4.5)	2 (6.3)	0 (1.9)	11 (6.5)	3 (2.8)
3 Neg. cis/het	4 (1.9)	4 (2.6)	1 (0.8)	0 (2.6)	0 (1.1)
6 None	11 (14.6)	23 (20.2)	8 (6.3)	19 (20.9)	10 (9)
GI					
Positive					
1 Pos.	9 (12.1)	16 (13.1)	11 (7.1)	12 (15.6)	6 (6.1)
6 None	15 (11.9)	10 (12.9)	3 (6.9)	19 (15.4)	6 (5.9)
Negative					
1 Neg.	1 (1.8)	2 (2.4)	0 (0.8)	5 (3.1)	1 (1)
3 Neg. cis/het	0 (0.2)	1 (0.3)	0 (0.1)	0 (0.3)	0 (0.1)
6 None	16 (15)	19 (19.4)	7 (6.2)	24 (25.5)	8 (7.9)

Table 3-5. Number of positive and negative comments by self (expected values in parentheses).

Further analysis revealed a four-way interaction between identity group, content, actor, and valence, $F(4, 167) = 2.71, p = 0.032$. This was followed up by three-way ANOVAs examining the comments reported for self and others. The main effect for content on comments made by others revealed that comments about sexual orientation were more frequent ($M = 1.9$) than comments about gender identity ($M = 1.6$), $F(1, 174) = 14.1, p < 0.001$. The main effect for valence on the same comment group indicated that negative comments ($M = 2.4$) were made about sexual orientation more frequently than positive comments ($M = 1.1$), $F(1, 174) = 54.2, p < 0.001$.

In comments made by the participants themselves, there were interactions of identity group with content and valence, $F(4, 170) = 3.8, p = 0.06$. Non-heterosexual women ($M = 3.5$) and heterosexual ($M = 3.4$) women made more positive comments about gender identity than heterosexual men ($M = 2.2$).

Chapter 4

Discussion

Summary of results

Overall, the results suggested that non-heterosexual and nonbinary individuals are more likely to notice when another player makes a comment about sexual orientation or gender identity, with non-heterosexual men noticing the most jokes and offhand comments and heterosexual men noticing the least. Regarding types of comments, non-heterosexual women make more offhand comments and serious discussion points than heterosexual men and heterosexual women. Nonbinary people also make more serious comments than heterosexual men and heterosexual women.

Further, non-heterosexual women and heterosexual women are more likely to make positive comments than heterosexual men. The sizable presence of negative comments about sexual orientation by others in the open-ended results parallels the ANOVA results showing this predominance.

In addition, the results indicated that players are more likely to mention sexual orientation than gender identity during online gameplay.

Limitations of the study

Due to the lack of variability across participant race and ethnicity, this study did not take into account how LGBTQ+ identities intersect with non-white racial and ethnic identities during online gameplay.

The sample of participants is also not varied across age, with only 7.8% of participants being over the age of 40.

There were not enough binary transgender participants to draw conclusions about whether transgender and nonbinary individuals are more likely to notice mentions of gender identity during online gameplay in comparison with their cisgender coplayers. Binary transgender individuals were sorted accordingly into the non-heterosexual men, non-heterosexual women, heterosexual men, and heterosexual women groups.

Approximately one-quarter of participants did not report their demographics at the end of the survey, and so those responses could not be used in the analyses that placed participants into five distinct identity groups.

Directions for future research

Further research should be conducted with participant groups that are more diverse across race, ethnicity, and age, so that intersectional identities and experiences can be accurately evaluated. Additional analyses could be done to examine the differences in means of cisgender and transgender participants, much like this study examined the differences in means of heterosexual and non-heterosexual participants. Future studies could also more thoroughly investigate which online games have higher rates of jokes, offhand comments, and serious discussion points, and which games have positive comments more frequently than negative

comments and vice versa. Number of heterosexual and non-heterosexual participants playing each game should also be investigated.

Appendix A

Open-ended Sexual Orientation/Gender Responses

Asexual	12	Female	3	Pansexual	19
Bisexual/lesbian	1	Gay/homosexual	18	Queer	7
Bisexual	34	Heterosexual	84	Questioning	1
Demisexual	1	Lesbian	11	Unknown	65

Table A-1. Participant sexual orientations. The one demisexual participant was grouped with the asexual participants.

Agender	3	Femme	1	Nonbinary	7
Androgynous (male-leaning)	1	Genderfluid	4	Nonbinary man	1
Cisgender man	14	Genderqueer	1	Nonbinary woman	3
Cisgender woman	9	Lesbian	1	Non-conforming	1
Demiboy	1	Male	82	Transgender man	4
Female	50	Male, sometimes nonbinary	1	Transgender woman	5
Female/genderfluid	1	Male/neutrois	1	Unknown	65

Table A-2. Participant gender identities. The lesbian response was coded as a non-heterosexual woman.

Appendix B

Survey

Consent form (Social media)

Q1 Consent for Exempt Research

The Pennsylvania State University

Title of Project: LGBTQ+ experiences in online gaming communities

Principal Investigator: Laura Gillin

Telephone Number: [Redacted]

Advisor: Dr. Margaret L. Signorella

Advisor Telephone Number: [Redacted]

If you play online video games and are 18 years of age or older, you are being invited to volunteer to participate in a research study. This summary explains information about this research.

- The purpose of this study is to look at people's experiences in online gaming communities in regard to gender and sexual orientation.
- After consenting to participate, individuals will be asked to fill out a brief online survey about their experiences in online gaming.
- Data will be completely confidential.

Participants must be 18 years of age or older.

If you have questions or concerns, you should contact Laura Gillin at [redacted]. If you have questions regarding your rights as a research subject or concerns regarding your privacy, you may contact the Office for Research Protections at 814-865-1775.

Your participation is voluntary and you may decide to stop at any time. You do not have to answer any questions that you do not want to answer.

If you agree to participate in this study, please select "Yes, I agree". If you do not agree, please select "No, I do not agree".

Do you agree to participate in this study?

- ☐ Yes, I agree. (1)
- ☐ No, I do not agree. (2)

Consent form (Subject pool)

Q1 Consent for Exempt Research

The Pennsylvania State University

Title of Project: LGBTQ+ experiences in online gaming communities

Principal Investigator: Laura Gillin

Telephone Number: [Redacted]

Advisor: Dr. Margaret L. Signorella

Advisor Telephone Number: [Redacted]

If you play online video games and are 18 years of age or older, you are being invited to volunteer to participate in a research study. This summary explains information about this research.

- The purpose of this study is to look at people's experiences in online gaming communities in regard to gender and sexual orientation.
- After consenting to participate, individuals will be asked to fill out a brief online survey about their experiences in online gaming.
- Data will be completely confidential.

This survey will take about 15 minutes to complete and you will receive one credit for participation. Since the Cross Campus Subject Pool will be used to recruit participants, you will

receive course credit for participating as specified in the syllabus provided by your instructor. You may decide not to participate in this research study. Alternative means for earning this course credit are available as specified in your course syllabus.

If you have questions or concerns, you should contact Laura Gillin at [redacted]. If you have questions regarding your rights as a research subject or concerns regarding your privacy, you may contact the Office for Research Protections at 814-865-1775.

Your participation is voluntary and you may decide to stop at any time. You do not have to answer any questions that you do not want to answer.

If you agree to participate in this study, please select "Yes, I agree". If you do not agree, please select "No, I do not agree".

Do you agree to participate in this study?

- ☐ Yes, I agree. (1)
- ☐ No, I do not agree. (2)

Survey (Social media and subject pool)

Q2 Which online multiplayer games have you played most in the last six months? List up to three.

Q7 How often do you interact (e.g., text chat, headsets, etc.) with other players when playing online multiplayer games?

- ☐ Every time or almost every time (1)
- ☐ Fairly often (2)
- ☐ About half the time (3)
- ☐ Not very often (4)
- ☐ Never or almost never (5)

Q8 How often do other players mention sexual orientation in jokes, offhand comments, or serious discussion?

	Jokes (1)	Offhand comments (2)	Serious discussion (3)
Every time or almost every time (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fairly often (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
About half the time (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not very often (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never or almost never (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 When sexual orientation is mentioned by other players, how often is it a generally positive (e.g., supportive or favorable) statement?

- ☐ Every time or almost every time (1)
 - ☐ Fairly often (2)
 - ☐ About half the time (3)
 - ☐ Not very often (4)
 - ☐ Never or almost never (5)
-

Q10 In regard to sexual orientation, please describe some of the generally positive jokes, offhand comments, or serious discussion points said by other players.

Q19 When sexual orientation is mentioned by other players, how often is it a generally negative (e.g. critical or unfavorable) statement?

- ☐ Always or almost always (1)
- ☐ Fairly often (2)
- ☐ About half the time (3)
- ☐ Not very often (4)
- ☐ Never or almost never (5)

Q20 In regard to sexual orientation, please describe some of the generally negative jokes, offhand comments, or serious discussion points said by other players.

Page Break

Q18 How often do you mention sexual orientation in jokes, offhand comments, or serious discussion?

	Jokes (1)	Offhand comments (2)	Serious discussion (3)
Every time or almost every time (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fairly often (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
About half the time (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not very often (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never or almost never (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11 When sexual orientation is mentioned by yourself, how often is it a generally positive (e.g., supportive or favorable) statement?

- ☐ Every time or almost every time (1)
 - ☐ Fairly often (2)
 - ☐ About half the time (3)
 - ☐ Not very often (4)
 - ☐ Never or almost never (5)
-

Q22 In regard to sexual orientation, please describe some of the generally positive jokes, offhand comments, or serious discussion points said by yourself.

Q21 When sexual orientation is mentioned by yourself, how often is it a generally negative (e.g., critical or unfavorable) statement?

- ☐ Always or almost always (1)
- ☐ Fairly often (2)
- ☐ About half the time (3)
- ☐ Not very often (4)
- ☐ Never or almost never (5)

Q12 In regard to sexual orientation, please describe some of the generally negative jokes, offhand comments, or serious discussion points said by yourself.

Page Break

Q13 How often do other players mention transgender, gender-non-conforming, or other non-binary gender identities in jokes, comments or serious discussion?

	Jokes (1)	Offhand comments (2)	Serious discussion (3)
Always or almost always (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fairly often (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
About half the time (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not very often (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never or almost never (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14 When gender identity is mentioned by other players, how often is it a generally positive (e.g., supportive or favorable) statement?

- ☐ Always or almost always (1)
 - ☐ Fairly often (2)
 - ☐ About half the time (3)
 - ☐ Not very often (4)
 - ☐ Never or almost never (5)
-

Q15 In regard to gender identity, please describe some of the generally positive jokes, offhand comments, or serious discussion points said by other players.

Q16 When gender identity is mentioned by other players, how often is it a generally negative (e.g., critical or unfavorable) statement?

- ☐ Always or almost always (1)
- ☐ Fairly often (2)
- ☐ About half the time (3)
- ☐ Not very often (4)
- ☐ Never or almost never (5)

Q17 In regard to gender identity, please describe some of the generally negative jokes, offhand comments, or serious discussion points said by other players.

Page Break

Q23 How often do you mention transgender, gender-non-conforming, or other non-binary gender identities in jokes, comments or serious discussion?

	Jokes (1)	Offhand comments (2)	Serious discussion (3)
Always or almost always (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fairly often (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
About half the time (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not very often (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never or almost never (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q24 When gender identity is mentioned by yourself, how often is it a generally positive (e.g., supportive or favorable) statement?

- ☐ Always or almost always (1)
 - ☐ Fairly often (2)
 - ☐ About half the time (3)
 - ☐ Not very often (4)
 - ☐ Never or almost never (5)
-

Q25 In regard to gender identity, please describe some of the generally positive jokes, offhand comments, or serious discussion points said by yourself.

Q26 When gender identity is mentioned by yourself, how often is it a generally negative (e.g., critical or unfavorable) statement?

- ☐ Always or almost always (1)
- ☐ Fairly often (2)
- ☐ About half the time (3)
- ☐ Not very often (4)
- ☐ Never or almost never (5)

Q27 In regard to gender identity, please describe some of the generally negative jokes, offhand comments, or serious discussion points said by yourself.

Page Break

Q5 What is your age?

- ☐ 18-24 years (1)
- ☐ 25-30 years (2)
- ☐ 31-40 years (3)
- ☐ 41-50 years (4)
- ☐ 51+ years (5)

Q6 What is your race/ethnicity?

Q3 What is your sexual orientation?

Q4 What is your gender?

End of Block: Default Question Block

Start of Block: No consent - thank you

Q30 Thank you!

End of Block: No consent - thank you

Appendix C

List of Games

Aetolia	1	Golf It	1	Roblox	2
Angry Birds	1	Grand Theft Auto	7	Rocket League	8
Anthem	2	Gran Turismo	1	Runescape	6
Apex Legends	6	Guild Wars	6	Sea of Thieves	1
Ark	1	H1Z1	1	Second Life	1
Arma	1	Habbo Retros	1	ShellShock	2
Awesomenauts	1	Hearthstone	6	Sims	1
Battleborn	1	Hearts of Iron	1	Skyforge	1
Battlefield	8	Heroes of the Storm	7	Smite	1
Blade & Soul	1	Idle Heroes	2	Splatoon	3
Bless	1	Killing Floor	2	Squad	1
Borderlands	4	Last of Us	1	Star Trek	2
Brawlhalla	2	League of Legends	21	Star Wars	7
Champions	1	Left 4 Dead	2	Starcraft	2
Chivalry	1	Lord of the Rings	3	Stardew Valley	1
Civilization	2	Madden	4	Street Fighter	1
Clash of Clans	1	Magic the Gathering	1	Super Smash Bros.	11
Call of Duty	25	Maple Story	1	Tabletop Sim.	2
Combat Arms	1	Mario Kart	3	Team Fortress	9
Counterstrike	10	Mass Effect	1	The Division	1
Crossy Road	1	MechWarrior	2	Toontown	2
DayZ	1	Minecraft	12	Total War	1
DC Universe Online	1	Monster Hunter	5	Town of Salem	2
Dead by Daylight	6	Naruto	1	Vainglory	1
Destiny	18	NationStates	1	War Thunder	1
Diablo	9	NBA	2	Warcraft	1
Don't Starve	2	Neverwinter	3	Warframe	11
DotA	9	NHL	2	Wii Sports	1
Dragon Ball	2	No Man's Sky	1	Wizard 101	2
Dungeons & Dragons	2	One Hour One Life	1	World of Tanks	2
Dying Light	1	Overcooked	1	World of Warcraft	29
Elder Scrolls	8	Overwatch	75	World of Warships	4
Elite Dangerous	1	Paladins	1	World War 3	1
Europa Universalis	1	Path of Exile	3	xanje.com	1
Eve	2	Payday	1		
Fallout	11	Phantasy Star	1		
Far Cry	1	Planetside	1		
FIFA	5	Pogo	1		
Final Fantasy	10	Pokemon	4		
Football Manager	1	Poker	2		

For Honor	2	Portal	1		
Fortnite	29	Project Zomboid	1		
Forza	2	PUBG	11		
Gary's Mod	1	Rainbow Six	8		
Gears of War	1	Red Dead	8		
Gems of War	1	Rise of Civilizations	1		

Table C-1. List of games played by series and number of players. Some games set in the same fictional universe were kept separate due to the differences in type of gameplay (e.g., *Warcraft* and *World of Warcraft*).

Appendix D

Frequency of rating scale items

		N	Mean	Std. Deviation
SO Comments				
Self	Jokes	229	0.91	1.181
	Offhand	226	0.8	1.083
	Serious	224	0.93	1.132
Others	Jokes	254	2.09	1.282
	Offhand	252	1.77	1.167
	Serious	250	0.73	1.005
GI Comments				
Self	Jokes	196	0.37	0.796
	Offhand	190	0.43	0.812
	Serious	189	0.64	1.020
Others	Jokes	206	1.17	1.206
	Offhand	203	0.93	1.037
	Serious	203	0.44	0.777

Table D-1. Frequency of jokes, offhand comments, and serious discussions about sexual orientation and gender identity by self and others.

		N	Mean	Std. Deviation
SO Valence				
Self	Positive	226	1.25	0.855
	Negative	223	0.41	0.972
Others	Positive	252	1.29	1.154
	Negative	252	2.47	1.34
GI Valence				
Self	Positive	187	2.89	1.601
	Negative	187	0.37	0.933
Others	Positive	200	0.98	1.234
	Negative	200	2.2	1.572

Table D-2. Valence of comments about sexual orientation and gender identity by self and others.

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ACADEMIC VITA

Laura Gillin

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Education

The Pennsylvania State University, Media, PA May 2019
Bachelor of Arts: Psychology
Minor in Women's Studies

Honors and Awards

- | | |
|--|-----------|
| • Penn State Chancellor's Award | 2015-2017 |
| • Penn State 4-Year Provost's Award | 2015-2019 |
| • Academic Achievement Award | 2016-2018 |
| • PNC Financial Corp Endowed Delaware Campus Scholarship | 2017-2018 |
| • Lauren E. Chrest Memorial Scholarship | 2017-2019 |

Research Interests

My main area of interest is in social psychology, particularly the ways in which society can influence the development of those in marginalized groups. Specifically, I am interested in gender and sexual orientation and how societal perception of these identities can influence an individual.

I am also interested in abnormal psychology. I am primarily interested in body-focused repetitive behaviors, with a focus on excoriation disorder.