Journal of Physical Education and Sports Management
December 2022, Volume 9, pp. 12-21
ISSN 2373-2156 (Print) 2373-2164 (Online)

Published by American Research Institute for Policy Development
DOI: 10.15640/jpesm.v9a2
URL: https://doi.org/10.15640/jpesm.v9a2

"Uh oh, we have an Egirl": When, Where, and How Gender Influences Gaming

Trevor Bopp[1], Ph.D, Kostas Karadakis[2], Ph.D, Megan Shay[3], Ph.D.

Abstract

Despite the increasing presence of female participants and fans, online gaming remains a space in which women are minoritized and marginalized. To better understand how gender influences the experiences of women gamers, we examined the chatlogs and field notes of 18 gamers over a four-week period. Our analysis confirmed toxic and sexist rhetoric toward women gamers maintaining gaming as hypermasculine space. Moreover, we examined when such toxicity takes place, and found it to be most prevalent when playing massively multiplayer online role-playing games during the latter half of the week into the weekend, as well as in the evening and nighttime hours. The results add further insight into women's gaming experiences with discrimination and hostility. Practical implications stemming from the resultant types of aggression, games played, competition levels, and time(s) during which negative behaviors were experienced, are discussed and future research suggestions made toward the advancement of a more inclusive gaming environment.

Keywords: Women, gender, online gaming, toxic masculinity, esports

1. Introduction

Electronic sport (esport) is a subdomain of video-gaming that denotes competitive play ranging from professional teams to individual amateurs, typically through organized gaming events or tournaments, hosted both in-person and in an interactive online environment (Chan et al., 2022; Darvin et al., 2020; Gough, 2021a; Scholz, 2019). Despite the emerging state of the industry, the accessibility of esports (e.g., advances in technology, multiple gaming platforms on which to play and/or spectate, reduced geographical hindrances) is enabling its exponential growth (Cranmer et al., 2021). In 2021, the global esports market was estimated at $1.28 billion, with an audience size of 474 million fans (Statista, 2021). As the popularity, widespread consumption, and media coverage of esports continue to increase, the industry has garnered comparisons to the growth and attention received by more traditional sport (Funk, et al., 2018). However, unlike traditional sport, the enforcement and administration of rules and competition is not carried out through a central governing body, but rather, game manufacturers and tournament organizers (Jenny et al., 2017). The decentralized regulation of the industry makes it a fertile space to serve as a means for social and cultural advancement (Reitman et al., 2020), while concurrently reproducing gendered norms and hierarchies (Cote, 2020; Rogstad, 2021).

It is estimated that 35% of esports enthusiasts are women, but only 5% play professionally, where they earn 0.05% of wages paid to male players (Cagnè-LeBel, 2022; Hilbert, 2019; Newzoo, 2022); thereby contributing to a gaming ecosystem in which females continue to be minoritized and marginalized (Gough, 2021b; Darvin et al, 2020; Hindman & Walker, 2020). Research on gender-based differences has been ongoing and revealed discrepancies in genre and game preference, as well as gameplay intentions and consumption (Jang et al., 2021).

[1] Assistant Professor, Department of Human Nutrition and Hospitality Management, The University of Alabama
475 Russell Hall, Box 870311, Tuscaloosa, AL 35487, 205-348-2527, tbopp@ua.edu
[2] Associate Professor, Southern New Hampshire University
[3] Assistant Professor, Southern New Hampshire University

Moreover, the practical implications of such factors on how one identifies (e.g., gamer, gender, race) must be considered if research into the nuanced spaces of the gaming ecosystem is to positively influence the experiences and engagement of women and other marginalized gamers. Thus, as esports continue to mature and permeate traditional sport spaces and organizations, scholarly efforts (e.g., education, research) are needed to aid practitioners in the successful navigation of the industry's growth and development toward a more inclusive (e)sport space (Cunningham et al., 2018; Funk et al., 2018; Heere, 2018).

Research efforts stemming from the field of sociology tend to focus on gender and identity creation and maintenance in gaming communities, as well as how said communities can challenge and deconstruct gendered discourse, stereotypes, attitudes, depictions, and treatment (Bryce & Rutter, 2005; Condis, 2015; Cote, 2020; Reitman et al., 2020; Ruberg et al., 2019; Ruvalcaba et al., 2018; Taylor, 2009). For instance, research has examined performativity of gender and gender identity (Zolides, 2015), hegemonic masculine barriers (Rogstad, 2021), #Gamergate and geek masculinity (Braithwaite, 2016), tournament earning gaps (Siutila & Havaste, 2019), sexual and gender harassment coping strategies (Cote, 2017), and a toxic culture that perpetuates gender biases and inequalities, as well as discrimination and hostility toward women (Darvin et al., 2020; Kim, 2017; Madden et al, 2021). Social and legal concerns over cyberbullying, a lack of diversity, and gender discrimination pose a substantial threat to the industry (Foley & Lardner, 2022) and need to be addressed in a practical and applicable manner. Gender inequalities pervade many contexts in the gaming ecosystem and scholarly research can help to identify and locate areas of concern, as well as possible curative interventions (Cote, 2020; Ruberg et al., 2019). To this end, the purpose of this project is to better understand and identify when, where, and how gendered toxicity might influence the gaming experiences of women.

2. Literature Review

Despite being recognized as a male-dominated space, akin to many traditional sports, women have always engaged with games in the electronic, digital, and online ecosystem of esport (Bryce & Rutter, 2003; Rogstad, 2021), having contributed to the advancement of esport as casual gamers, active streamers, tournament competitors, event attendees, and partaking in gambling activities (Gainsbury et al., 2017). The notion that women are not interested in gaming and esports, representing a small minority of participants, is challenged when reviewing polls which have regularly reported that at least 41% (US participants) and 45% (EU participants) of video game players are female (Entertainment Software Association, 2020; Interactive Software Federation of Europe, 2020). Moreover, female gamers represent nearly a third of all players of vastly popular esport games such as Call of Duty (36%), Fortnite (34%), and Super Smash Bros (31%; Statista, 2021). Despite these levels of involvement, overall female participation is lacking, particularly as professional and semi-professional players. Efforts have been made to garner more female interest and engagement; however, female-only tournaments and leagues are perceived as low-level contests that may serve to disenfranchise female gamers by restricting them to online play and with smaller earnings (Siutila & Havaste, 2019).

Such disparities have led researchers to argue that women exist in this space but are deterred from playing or treated as "invisible" by their male counterparts (Bryce & Rutter, 2005). Even when visibility is achieved, female gamers are likely to be labeled as "oddballs," "anomalies," or "intruders" (Hjorth et al., 2009). Moreover, women participants are often trolled or challenged through gendered discourse to prove their masculinity and/or legitimacy as a gamer; and subsequently typecast as a "sexy sidekick", "casual", or "fake geek girl" (Condis, 2015). It is also common for women gamers to be downgraded to supportive roles found in traditional sports such as cheerleaders, providing encouragement and financial support for their sons' or partners' teams, or 'booth babes' tasked with marketing gaming products to the male audience. Female players must constantly prove themselves as there is a perception that flirting and/or delegating tasks to others is a use of sexuality, not skill; and it is the player's sexuality that is considered their source of power (Mejeur & Cote, 2021). For example, 'halo hoes' has been used to denigrate the rare female competitor(s) in early esports tournaments, insinuating they play simply to distract other male competitors and draw their attention (Taylor et al., 2009). Similarly, Ruberg et al. (2019) found terms such as "titty streamer" not only suggest women draw attention and viewers through their looks and embodied sexualization but devalue their efforts and place.

These examples demonstrate the ever-present misogynistic and gendered discourse that maintains a toxic and masculine gaming culture that posits, both explicitly and implicitly, acceptable levels of femininity and is hostile to women gamers outside said prescriptions (Ruberg et al., 2019; Ruvalcaba et al., 2018). Several works have examined women's experiences participating in esport and concluded that the online communities and gaming industry are unwelcoming to women, and troubled with gender stereotypes, sexism, and harassment (Condis, 2015; Darvin, et al.,2020; Nakandala, et al., 2017; Ruotsalainen & Friman, 2018; Ruvalcaba, et al., 2018; Schelfhout, et al., 2021; Siutila & Havaste, 2019). It is no surprise then, that gaming culture tends to be referenced more by women as a barrier to participating rather than the type of game (Yee, 2008). The (mis)perception that women's skills are not equal or comparable to men illustrates dialogue found at competitive events that tend to be present with misogynistic, or at least, regressive beliefs about women (Schelfhout et al., 2021; Taylor, 2012). Despite and because of this, advocates for an inclusive esport environment repeatedly present spaces for female engagement and opportunities to challenge societal gender roles and theories of masculinity and femininity (Bryce & Rutter, 2005).

Research by Mejeur and Cote (2021) explores gamer identity and discusses that it is not simply male, but also consists of different forms of masculinity that either supports or diverges from the "mythical norm". Esports integrate the idea of traditional athletic masculinity with geek masculinity, consequently "transforming and enforcing hegemonic masculinity in the context of geek gamer culture" (Ruotsalainen, & Friman, 2018, p. 3). This geek gamer culture typecasts white, masculine, and heterosexual males as "gamers"; and anyone who does not fit this profile is considered an outsider and likely to experience animosity and harassment (Cote, 2020). For instance, even female gamers who experience success in this space are suggested to have earned their accomplishments due only to assistance from more skilled, male players (Mejeur & Cote, 2021).

Grindstaff and West (2011) suggest that men's control in the facilitation and delivery of esport contributes to a hegemonic (geek) masculine culture, manifesting a toxic environment for women that normalizes them as representatives of their gender, rather than as gamers (Ruotsalainen & Friman, 2018). Darvin et al. (2020) applied the theoretical tenets of hegemonic masculinity finding that because of "strong male cultural norms and ideologies, it may be difficult for male esports participants to conceptualize the experience of an underrepresented group, such as their female counterparts" (p. 43). Based on the male-dominated structure of esport environments and the similarities associated with processes of hegemony for traditional sport, esports settings need to continue to examine participant experiences (Cote, 2020; Ruvalcaba et al., 2018).

It is important to examine the gendered experiences and marginalization of gaming participants, inclusive of the extant toxicity experienced, the spaces in which they exist, when they occur, and at what level of play. Thus, the purpose of our study is to better understand and identify when, where, and how gender influences the gaming experiences of women. More specifically, we seek to explore the potential relationships between amount of time, time of day, and day of week played, as well as game genre and level of play, and women gaming experiences.

3. Methods

3.1 Participants and Procedure

Participants for this IRB-approved project were students of an Introduction to Esport class; 18 of whom agreed to document their online gaming experiences over a four-week period for a class project. The age range of the students was 18-30 years old, and the gender breakdown was 15 male and 3 female students. With the intent of learning more about the treatment of women in online gaming, the male participants used female-identifying gamer tags, while the female students used their personal accounts or created a fictitious ID. To determine the validity of the gendered gaming IDs, a consensus check was run. Accordingly, eight of the IDs were unanimously perceived as female, one unanimously male, five achieved at least 85% agreement as female, and the remaining four ranged between 15-50% female. Participants were instructed to select and play a title of their choice on their preferred gaming platform. The games selected by the participants included Desert Storm, FIFA, Fortnite, League of Legends, Madden, Overwatch, Rocket League, and Super Smash Brothers. Participants were asked simply to play the game and directed not to speak or engage (i.e., communicate) with anyone. Prior to data collection, students were trained on how to best record and organize their notes. Accordingly, during the four-week period, participants kept a record of how many games/matches and hours they played, their rank, the time(s) of day during which they participated, and if/when any form of interaction, comment, or behavior occurred. After each gaming session, participants saved their chatlogs and made notes of their experiences. At the conclusion of the four weeks, all chatlogs, notes, and additional data were collected, transcribed, and uploaded into a Microsoft excel spreadsheet.

3.2 Analysis

Given the exploratory inclination of this project, the data collected from participants were analyzed through an inductive content analysis (Elo & Kyngäs, 2008). In the preparation phase, each of the 18 participants anonymized and submitted their personal chatlogs, observations, and documented experiences (e.g., comment, interaction, behavior, etc. from other gamers), each of which was unitized for analysis by the lead investigator (Campbell et al., 2013). Each unit of analysis was then collated and distributed to the students in the class, akin to a book of transcripts. Over several class periods and reviews of the transcripts, the lead investigator and student participants codified units of data though descriptive coding (Saldaña, 2013). Categories were then created to effectively group codes that exemplify the full gamut of each participants' experiences (Elo & Kyngäs, 2008). A negotiated coding approach was undertaken to help strengthen reliability of the project; during which the verification of the coding scheme and results of categorization, discrepancies and differences of opinion were discussed until consensus was reached (Garrison et al., 2006; Thomas, 2006).

During this process, the investigators used three techniques described by Patton (2002) to increase trustworthiness and credibility. First, the data were kept in an electronic database (Microsoft Excel), offering an audit trail for external reviews of the results at any given time. Second, all student participants and the lead investigator coded the data, during which they came together to discuss the suitability of the established codes and categories via a negotiated coding process (Garrison et al., 2006). This enhances credibility to the discoveries as the data have been examined by more than one individual and any confusion of context could be explained by the participant themselves. The final step in the analysis was to assign a numerical code to the observed experiences, in accordance with their relevant category, and to establish quantifiable demographics of the occurrences.

4. Results

After charting and documenting their online gaming experiences over a four-week period, the 18 participants tallied 410 hours of gameplay, documenting a total of 575 occurrences, interactions, and comments. These coded and categorized occurrences revealed twelve different types of experiences witnessed by the "female" gaming participants: *Toxic Behavior, Sexist Behavior, Positive Sporting Behavior, Friend Request, Rude Behavior, Threatening Behavior, Banter, Instructional, Sexual Harassment, Flirting, Playful,* and *None. None* denotes that a participant did not experience any occurrence or interaction during their online engagement. Toxic Behavior was reported most often (44.7%), followed by Sexist Behavior (19.1%), and Positive Sporting Behavior (10.3%). See Table 1 for additional results and examples of occurrences that were experienced by the participants.

Table I. Categories of Participant Experiences

Categories	Frequency	Percent	Examples
Toxic Behavior	257	44.7%	Was told I weigh 265 pounds; immediately belittled by "gay guys who hate women"; Messaged by member of another guild, harrasing me for killing their guildmate; also questioned by guild for bringing up an issue with a female, saying it was "girl drama", not a l; fucking trash needs to be banned from ranked; ff (forfeit); "maybe if you stop trying to demo all the time you could hit the ball"; Need me to penetrate you girl?; You're Cancer
Sexist Behavior	110	19.1%	"Got you boo"; "Rez me baby"; whats up girl can i get yo number; Is your boyfriend palying?; "uh oh we have an egirl"; You Suck Bitch; Bro you aint fooling anyone; 8=====D; how long is your hair; hello mami
Positive Sporting Behavior	59	10.3%	nice 1; what a baller; youre a solid player; nice steal; can i give you a tip im not trying to be rude?; good sportsmanship; Great Pass; you a champ?; gg; Get "fuuuuuuucked"; i can not do that impressive; wow your good
Friend Request	51	8.9%	Yoooo add me; Friend Request
Rude Behavior	48	8.3%	Treadmills help with the weight...js; Try jogging; Way; U look slikk fat TBH; what wrong big mama; what up fatty; Lmao I couldn't fit in your size with a fat suit on hahahaha; omg ur a femist; #saduglywomen; ugly

Threatening Behavior	38	6.6%	You gotta loosen up with that shotgun; Kill yourself; the french will do one thing will you rape in the public square;I stand bigger than yoru abusive dad, just saying(:; fist fight me like a man; hand to hand combat is more fun
Banter	6	1.1%	Get balled; Stop cutting me off; hahaha I suck; reeeeee? ?!@?@?
Instructional	2	0.3%	Stop Camping Fucker; when rotating make sure you check to back post first :)
Sexual Harassment	2	0.3%	How many stds you got? you should save your saliva for submission; might be in love; adorable and play video games; French kiss sur ton vagin; Join the party big mama please#biggirlsneedlovetoo; Hi sexy;
Flirting	1	0.2%	teammate keeps passing to me, even when not the best option.
Playful	1	0.2%	"Will you marry me?";
Total	**575**	**100%**	

The genre of video games were considered in the analysis. Participants playing Massively Multiplayer Online Role-Playing Games (MMORPG) were reported to experience the most occurrences (82.6%), followed by Sport Simulations (12.3%). Each of the other gaming genres, Multiplayer Online Battle Arena (MOBA), First Person Shooter (FPS), Action Adventure, and Battle Royale, accounted for less than 2% of the total number of occurrences. Most occurrences were reported by elite players (76.8%) during the PM hours (83%) of Fridays (23.7%) during the four-week evaluation period. See Table 2 for additional details.

Table II. Who, Where, and When of Comment Occurrences

Game Genre	Frequency	Percent
MMORPG (*Desert Storm*)	475	82.6%
Sport Simulation *(FIFA*, *Madden*, *Rocket League*)	71	12.3%
Action Adventure (*Fortnite*)	10	1.7%
First Person Shooter (*Ov*erwatch)	10	1.7%
Other (*Super Smash Brothers*)	8	1.4%
MOBA (*League of Legends*)	1	0.2%
	575	
Time of Day		
AM	72	12.5%
PM	503	87.5%
	575	
Level of Play		
Casual	89	15.5%
Competitive	9	1.5%
Elite	477	83%
	575	
Day of the Week		
Monday	61	10.6%
Tuesday	53	9.2%
Wednesday	103	17.9%
Thursday	79	13.7%
Friday	136	23.7%
Saturday	84	14.6%
Sunday	59	10.2%
	575	
Hours Played		
<= 2	19	4.6%
3 – 4	104	25.4%
5 – 6	42	10.2%
7 – 8	17	4.2%
9 – 10	92	22.4%

11 – 12	5	1.2%
13 – 14	85	20.8%
=> 15	46	11.2%
Total	**410**	**100**

5. Discussion and Implications

Overall, our analysis revealed toxic and sexist rhetoric toward women gamers to be most prevalent in the online environment when playing MMORPGs during the latter half of the week into the weekend, as well as in the evening and nighttime hours. The findings provide further insight into the influence of gender, particularly for female gamers, at all levels of play; demonstrating that it is not just the elite levels of esport where gendered toxicity is experienced, but also among casual, and to a lesser extent competitive, gaming. Perhaps current participants and gamer tags expressing femininity dissipate on the competitive scene as they do not fit the normative, masculine profile embraced in the online gaming environment and at mainstream esport events and tournaments.

Traditional sport segregates men and women on the claims of biological differences that result in males having more muscle, strength, aggression, and power; thereby situating females into supplemental roles, such as cheerleaders and swimsuit models, that we witness being replicated in the esport industry (Taylor et al., 2009). The results from the current project do little to dissuade this argument when considering the toxic, sexist, rude, threatening behaviors, sexual harassment, and flirting experienced by our participants. Yet, given that the esport industry is experiencing increases in female engagement and fandom (Andrews & Crawford, 2021), it would behoove esport industry leaders to alleviate and/or minimize the aggressive predispositions, antagonistic activities, images of violence, hypermasculine culture, and highly competitive ethos that denigrate females in many gaming and online environments. Despite the presence of regulations and codes of conduct, gendered harassment endures (Friman & Ruotsalainen, 2022). A practical implication of our findings is that we provide a cursory overview to the times and days of the week during which the bulk of toxicity occurs, so that esport and online gaming administrators, as well as game designers, can focus their attention outside of gaming tournaments and events to quell negative discourse and behaviors toward women participants.

Similarly, our findings support that women gamers contend with a gendered social hierarchy at all levels of play (casual, competitive, and elite). Our participants experienced more negative behaviors at the elite level of play, which could be the result of dedicating more time in the online environment to hone their skills and refine their craft. However, we offer that this finding could result from a vague demarcation between competitive and elite gamers. Not much can be learned from this finding as currently (and independently) explained. However, much in the way that Jang and Byon's (2020) reorganization of gaming genres created three new and meaningful esport market segments that allow for each's unique consumers to be better served, so too could a delineation between the needs and motivations of distinct levels of play (e.g., amateur, novice, professional, elite). While we recognize a ranking system exists at the elite levels of competition, we suggest future research consider the merit and distinguishable characteristics of play at varying levels of gaming proficiency.

More importantly, that we found gender harassment existent at levels of play ranging from casual to elite might reveal how toxic meritocracy (Paul, 2018) paradoxically manifests hegemonic masculinity while concurrently elucidating why women gamers might be willing or expected to endure such demeaning and belligerent discourse. We argue that women gamers have the lived experiences, insight, and credibility to best challenge the phenomenon, yet might find themselves in the precarious position of having to reinforce normative toxicity or adopt negative behaviors to gain the cultural and social capital for the opportunity to do so. Almost a fifth (17%) of the toxic experiences were incurred by gamers playing below an elite level. Though previous research demonstrates the difficulties in deconstructing the current esport ecosystem of toxicity, masculinity, and meritocracy (Friman & Ruotsalainen, 2022; Paul, 2018; Schelfhout, et al., 2021), our findings suggest there might be a substantial opportunity for new and less-experienced players to help critically address, reconstruct, and develop a more inclusive gaming community (Boudreau, 2022).

Our results point to the logical conclusion that gamers who play more are subject to more negative discourse and behavior. Considering these results in context of the masculine normative gaming space, the existence of inappropriate comments and interactions can be explained by the very stereotypes themselves. Stereotypes are beliefs about groups of people, that when inaccurate, can produce prejudicial and discriminatory attitudes and behaviors (Siutila & Havaste, 2019). Thus, females seeking to develop an inclusive space for gamers can be further hindered by stereotype threat. That is, the performance and expectations of female esport participants can suffer from negative stereotypes that add pressure and inhibiting their ability to play better than their peers (Ruvalcaba et al., 2018). Likewise, Ruotsalainen and Friman (2018) found that gamers avoided being known or identified as a female gamer because of the added criticism they would receive related to their looks and abilities. Efforts have been made to garner more female interest and engagement; however, female-only tournaments and leagues are perceived as low-level contests that may serve to disenfranchise female gamers by restricting them to online play and with smaller earnings (Siutila & Havaste, 2019). Yet, even at the upper echelon of elite competition, women gamers have experienced toxic masculinity, bullying, and sexism from peers, teammates, and spectators (Schelfhout et al., 2021).

Our findings suggest that the experiences within and influenced by different game types and genres should continue to be explored. The primacy of game study research focuses on hardcore over casual games and has done so to the detriment of advancing the field of game studies (Chess & Paul, 2019). While the genre categories utilized in our project hardly do justice to the diversity of available styles and genres of gameplay, our results suggest that further work must be done in the analysis of how various games and genres contribute to, reconstruct, and reinforce dominant logics and narratives in the current games studies field (Coavoux et al., 2017). To our knowledge, the bulk of scholarly efforts and gameplay center on MMORPG, MOBA, and FPS. Through our work, we find that a good deal of toxicity may also occur in sport simulations, and suggest it be taken serious as a space in which gendered discourse and harassment are examined and monitored.

Curating and making available more demographic data on the makeup and experiences of participants in particular games, leagues, and events could illuminate all to the severity of the issue and lead to more education and resources to promote gender equality, as well as identify and alleviate gendered barriers. With this project, we contribute to this end by providing details of the toxic attitudes and behaviors experienced by "female" participants, as well as, in what games, level of play, and time of day such negative interactions occur. For instance, having a better sense of when and in which games negative gender tropes are most likely to occur, will allow games, leagues, and events to be more proactive with quelling such incidents through the increased presence of moderators during troubled timeframes and/or games. Additionally, disclaimers, warnings, and resources could be made more readily available and prominent during these times.

6. Conclusion

Recent research in games studies has called for a more nuanced and wide-ranging understanding of the esport ecosystem and gaming community (Boudreau, 2022; Chess & Paul, 2019). The results of our exploratory project validate such petitions by providing more insight into the current esport literature aimed at advancing a more inclusive online environment. More specifically, our work sheds light on when and where toxicity takes place in gaming and furthers knowledge on how it manifests. As a nascent field in the sport space, having a better sense of the types of harassment and degree to which and when they occur will help esport leaders and administrators better identify and influence policy to mitigate or prevent it from occurring. Overall, the results can help establish additional measures to create safe and inclusive environments for women gamers and marginalized esport players. By understanding and identifying the types of negative behaviors, comments, experiences, and barriers women gamers face, esport leaders and participants can use their influence and assert themselves to seek inclusion, challenge current structures and environments, and push toward a less toxic and masculine space.

7. Limitations

As with any research, there are limitations that future research could address. The first is the gender identity of the participants, as well as their gaming tags. Despite using several legitimate female gaming tags and running a consensus check, we cannot ensure that all usernames and tags were perceived as female. Additionally, of the student participants in this work, only three (17%) identified as female. Thus, the bulk of the self-reported incidents by participants may be influenced by the male perspectives and biases. Future studies should be sure to include more voices of female gamers. Given the accompanying social issues surrounding the PC/console divide (Peterson, 2018), that participants were able to utilize their preferred gaming platform could also be seen as a limitation.

Though outside the scope of this project, some of our participants reported negative experiences outside the context of gameplay and in other spaces in which they consume esport. Thus, we also recommend future research explore other esport platforms and mediums, such as Discord, Reddit, Twitch.tv., Twitter, and other social media outlets. Having access to and data from these diverse sources will afford researchers to better triangulate the commonalities of negative behaviors women gamers experience and may provide additional details and examples of praise, criticism, and harassment (Ruvalcaba et al., 2018). Additionally, the current project utilized participants from a college esport class, and while they are a representative sample of esport participants, future studies should aim to use a diversity of esport participants and more female esport participants. The use of additional participants will provide more opportunities for statistical analyses between categories such as level of play, game genres, types of negative behaviors experienced, and the originating source (i.e., Discord, during gameplay, etc.).

References

Andrews, S. K., & Crawford, C. M. (2021). Barriers, issues and similarities among women in esports and similar mixed gender sports: ascertaining common ground. In S. Andrews & C. Crawford (Eds.), *Pathways and Opportunities into the Business of Esports* (pp. 25–46). Hershey, PA.: IGI Global.

Boudreau, K. (2022). Beyond deviance: Toxic gaming culture and the potential for positive change. *Critical Studies in Media Communication*, 1-10. https://doi.org/10.1080/15295036.2022.2080848

Braithwaite, A. (2016). It's about ethics in games journalism? Gamergaters and geek masculinity. *Social Media + Society, 2*(4), 1-10. https://doi.org/10.1177/2056305116672484

Bryce, J., & Rutter, J. (2003). The gendering of computer gaming: Experience and space. In S. Fleming & I. Jones (Eds.), *Leisure cultures: Investigations in sport, media and technology* (pp 3-22). Bolton, England: Leisure Studies Association.

Bryce, J., & Rutter, J. (2005). Killing like a girl: Gendered gaming and girl gamers' visibility. In J. Raessens & J. Goldstein (Eds.), *Handbook of computer game studies* (pp. 310-310). Cambridge, MA: MIT Press.

Cagnè-LeBel, B. (2022, January 14). The "Femme Effect"- Implementing coed teams & tournaments in the esports industry. *Femme Gaming*. https://femmegaming.gg/the-femme-effect-implementing-coed-teams-tournaments-in-the-esports-industry/

Campbell, J. L., Quincy, C., Osserman, J., & Pedersen, O. K. (2013). Coding in-depth semistructured interviews: Problems of unitization and intercoder reliability and agreement. *Sociological Methods and Research, 42*(3), 294-320. https://doi.org/10.1177/0049124113500475

Chan, G. Huo, Y., Kelly, S., Leung, J., Tisdale, C., & Gullo, M. (2022). The impact of eSports and online video gaming on lifestyle behaviours in youth: A systematic review. *Computers in Human Behavior, 126*(106974), 1-16. https://doi.org/10.1016/j.chb.2021.106974

Chess, S., & Paul, C. A. (2019). The end of casual: Long live casual. *Games and Culture, 14*(2), 107-118. https://doi.org/10.1177/1555412018786652

Coavoux, S., Boutet, M., & Zabban, V. (2017). What we know about games. A scientometric approach to games studies in the 2000s. *Games and Culture, 12*(6), 563-584. https://doi.org/10.1177/1555412016676661

Condis, M. A. (2015). *The politics of gamers: Identity and masculinity in the age of digital media* (Publication No. 3737628) [Doctoral Dissertation, University of Illinois at Urbana-Champaign]. ProQuest Dissertations and Theses Global.

Cote, A. C. (2017). "I can defend myself": Women's strategies for coping with harassment while gaming online. Games and Culture, 12 (2), 136-155. https://doi.org/10.1177/1555412015587603

Cote, A. C. (2020). Casual resistance: A longitudinal case study of video gaming's gendered construction and related audience perceptions. *Journal of Communication, 70*, 819-841.

Cranmer, E. E., Han, D. D., Gisbergen, M., & Jung, T. (2021). Esports matrix: Structuring the esports research agenda. *Computers in Human Behavior, 117*(106671), 1-13. https://doi.org/10.1016/j.chb.2020.106671

Cunningham, G. B., Fairley, S., Ferkins, L., Kerwin, S., Lock, D., Shaw, S., & Wicker, P. (2018). eSport: Construct specifications and implications for sport management. *Sport Management Review, 21*(1), 1-6. https://doi.org/10.1016/j.smr.2017.11.002

Darvin, L., Vooris, R., & Mahoney, T. (2020). The playing experiences of esport participants: An analysis of treatment discrimination and hostility in esport environments. *Journal of Athlete Development and Experience*, 2(1), Article 3. https://doi.org/10.25035/jade.02.01.03.

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing 62*(1), 107–115. https://doi.org/10.1111/j.1365-2648.2007.04569.x

Entertainment Software Association. (2020). *2020 essential facts about the computer and video game industry*. https://www.theesa.com/wp-content/uploads/2020/07/Final-Edited-2020-ESA_Essential_facts.pdf.

Foley & Lardner LLP. (2022). *Esports survey report: Fourth annual esports survey*. https://www.foley.com/en/insights/publications/2022/01/fourth-annual-esports-survey-report

Friman, U., & Ruotsalainen, M. (2022). Gender and toxic meritocracy in competitive Overwatch: Case "Ellie". In Ruotsalainen, M., Törhönen, M., & Karhulahti, V. (Eds.), *Modes of esports engagement in Overwatch* (pp. 135-154). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-82767-0

Funk, D. C., Pizzo, A. D., & Baker, B. J. (2018). eSport management: Embracing eSport education and research opportunities. *Sport Management Review, 21*(1), 7–13. doi:10.1016/ j.smr.2017.07.008.

Gainsbury, S., Abarbanel, B., & Blaszczynski, A. (2017). Game On: Comparison of Demographic Profiles, Consumption Behaviors, and Gambling Site Selection Criteria of Esports and Sports Bettors. *Gaming Law Review,* 21(8). doi:10.1089/ glr2.2017.21813.

Garrison, D. R., Clevelan-Innes, M., Koole, M., & Kappelman, J. (2006). Revisiting methodological issues in transcript analysis: Negotiated coding and reliability. *The Internet and Higher Education, 9*(1), 1-8. https://doi.org/10.1016/j.iheduc.2005.11.001

Gough, C. (2021a, October 21). *eSports market – statistics and facts*. Statista. https://www.statista.com/topics/3121/esports-market/#dossierKeyfigures

Gough, C. (2021b, September 28). *Share of female eSports fans worldwide in 2019, by country*. Statista. https://www.statista.com/statistics/1109959/global-female-esports-audience/

Grindstaff, L., & West, E. (2011). Hegemonic masculinity on the sidelines of sport. *Sociology Compass*, 5, 859-881.

Heere, B. (2018). Embracing the sportification of society: Defining e-sports through a polymorphic view on sport. *Sport Management Review, 21*(1), 21-24. https://doi.org/10.1016/j.smr.2017.07.002

Hilbert, J. (2019, 9 April). Gaming & gender: How inclusive are eSports? *The Sports Integrity Initiative*. https://www.sportsintegrityinitiative.com/gaming-gender-how-inclusive-are-esports/

Hindman, L. C., & Walker, N. A. (2020). Sexism in professional sports: How women managers experience and survive sport organizational culture. *Journal of Sport Management, 34*, 64-76. https://doi.org/10.1123/jsm.2018-0331

Hjorth, L., Na, B., & Huhh, J. (2009). Games of gender: A case study on females who play games in Seoul, South Korea. In L. Hjorth & D. Chan (Eds.), *Gaming cultures and place in Asia-Pacific* (pp. 273–288). New York: Routledge.

Interactive Software Federation of Europe. (2020). *ISFE Key Facts 2020*. https://www.isfe.eu/isfe-key-facts/.

Jang, W., & Byon, K. K. (2020). Antecedents of esports gameplay intention: Genre as a moderator. *Computers in Human Behavior, 109*(106336), 1-12. https://doi.org/10.1016/j.chb.2020.106336

Jang, W., Byon, K. K., Williams, A., & Pedersen, P. M. (2021). Augmenting the formation of esports gameplay intention: Interaction effects of genre and gender. *Sport, Business and Management: An International Journal, 11*(5), 620-646. https://doi.org/10.1108/SBM-04-2021-0049

Jenny, S. E., Manning, R. D., Keiper, M. C., & Olrich, T. W. (2017). Virtual (ly) athletes: Where eSports fit within the definition of "Sport". *Quest, 69*(1), 1-18. https://doi.org/10.1080/00336297.2016.1144517

Kim, S. J. (2017). *Gender inequality in eSports participation: Examining league of legends* (Master's thesis). University of Texas, Austin. Retrieved from https://repositories.lib. utexas.edu/bitstream/handle/2152/62914/KIM-THESIS-2017.pdf?sequence¼1.

Madden, D., Liu, Y., Yu, H., Sonbudak, M. F., Troiano, G. M., & Harteveld, C. (2021). *"Why are you playing games? You are a girl!": Exploring gender biases in esports* [Proceedings]. 2021 CHI Conference on Human Factors in Computing Systems, Yokohama, Japan. https://doi.org/10.1145/3411764.3445248

Mejeur, C., & Cote, A. (2021). Who Gets to Be in The Guild? Race, Gender and Intersecting Stereotypes in Gaming Cultures. *Loading*, *14*(24), 70–89. https://doi.org/10.7202/1084839ar

Nakandala, S., Ciampaglia, G., Su, N., & Ahn, Y. Y. (2017, May). Gendered conversation in a social game-streaming platform. In *Proceedings of the International AAAI Conference on Web and Social Media,* 11(1), 162-171.

Newzoo (2022). *Global esports and live streaming market report.* https://newzoo.com/products/reports/global-esports-live-streaming-market-report

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). SAGE Publications.

Paul, C. A. (2018). *The toxic meritocracy of video games: Why gaming culture is the worst.* University of Minnesota Press.

Peterson, L. (2018). *Why aren't more black kids going pro in esports?*. The Undefeated. Retrieved from https://theundefeated.com/features/why-arent-more-black-kids-going-proin-esports/.

Reitman, J. G., Anderson-Coto, M. J., Wu, M., Lee, J. S., & Steinkuehler, C. (2020). Esports research: A literature review. *Games and Culture, 15*(1), 32-50. https://doi.org/10.1177/1555412019840892

Rogstad, E. T. (2021). Gender in eSports research: A literature review. *European Journal for Sport and Society,* 1-19. https://doi.org/10.1080/16138171.2021.1930941

Ruberg, B., Cullen, A., & Brewster, K. (2019). Nothing but a "titty streamer": legitimacy, labor, and the debate over women's breasts in video game live streaming. *Studies in Media Communication,* 35 (6), 466-481. DOI: 10.1080/15295036.2019.1658886.

Ruotsalainen, M., & Friman, U. (2018). "There Are No Women and They All Play Mercy": Understanding and Explaining (the Lack of) Women's Presence in Esports and Competitive Gaming. Proceedings of Nordic DiGRA.

Ruvalcaba, O., Shulze, J., Kim, A., Berzenski, S. R., & Otten, M. P. (2018). Women's experiences in eSports: Gendered differences in peer and spectator feedback during competitive video game play. *Journal of Sport and Social Issues*, 42, 295-311.

Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). SAGE Publications.

Schelfhout, S., Bowers, M., & Hao, A. (2021). Balancing Gender Identity and Gamer Identity: Gender Issues Faced by Wang 'BaiZe' Xinyu at the 2017 Hearthstone Summer Championship. *Games and Culture*, 16, 22-41. DOI: 10.1177/1555412019866348.

Scholz, T. (2019). *Esports is business: Management in the world of competitive gaming.* Basel, Switzerland: Springer International Publishing.

Siutila, M., & Havaste, E. (2019). A Pure Meritocracy blind to identity: Exploring the online responses to all-female esports teams in Reddit. *Transactions of the Digital Games Research Association*, 4(3), 43-74.

Statista (2021). *Statista dossier on the eSports market worldwide and in the U.S.* https://www.statista.com/study/34163/esports-market-worldwide-statista-dossier/

Taylor, N. (2009). *Power play: Digital gaming goes pro* (Doctoral thesis). York University. Retrieved from http://www.collectionscanada.gc.ca/obj/thesescanada/vol2/002/NR64963. PDF.

Taylor, N., Jenson, J., & de Castell, S. (2009). Cheerleaders/booth babes/Halo hoes: Programming, gender and jobs for the boys. *Digital Creativity*, 20, 239–252. doi:10.1080/ 14626260903290323.

Taylor, T. L. (2012). *Raising the stakes: E-sports and the professionalization of computer gaming*. Cambridge, MA: MIT Press.

Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation, 27*(2), 237–246. https://doi.org/10.1177/1098214005283748

Yee, N. (2008). Maps of digital desires: Exploring the topography of gender and play in online games. In Y. B. Kafai, C. Heeter, J. Denner, & J. Y. Sun (Eds.), *Beyond barbie and mortal kombat: New perspectives on gender and gaming* (83–96). Cambridge, MA: MIT Press.

Zolides, A. (2015). Lipstick bullets: Labour and gender in professional gamer self-branding. *Persona Studies*, 1, 42–53. doi:10.21153/ps2015vol1no2art467.