The Effects of Gender-Based Treatment in Competitive Gaming on the Gameplay Patterns of Female Players

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ABSTRACT

This study attempts to investigate the involvement of female players within competitive video games, examining gameplay and behavioral patterns as a result of discriminatory treatment. Competitive video games are a rapidly growing phenomenon, with their growing popularity exacerbated by the COVID-19 pandemic and expanding technology consumption. Historical exclusion against women in gaming provides significance to this study, as such exclusion has resulted in lower female involvement and discriminatory social behavior within the community. Semi-structured interviews were conducted with questions pertaining to specific experiences within competitive games as well as subsequent actions taken in response to such experiences. Data was analyzed using thematic analysis to determine commonalities in participant behavior. The themes generated from participant experiences suggest decreased involvement in a plethora of gameplay and communication methods, with reduced communication, gameplay regression, and conformity to gendered game roles being the three most common themes. The results of this study underscore the importance of inclusive behavior towards women in competitive gaming and may have implications for the future of gender equity in gaming and other male-dominated activities.

Introduction

Video game participation has been steadily increasing over the past few decades and has recently hit a period of extraordinarily rapid growth. Industry revenue has nearly doubled, from $120.4 billion to $235.7 billion between 2017 and 2022, and is projected to reach $321.1 billion by 2026 (Ballhaus et al., 2022). What was once seen as a niche activity has now become a cultural phenomenon, as research conducted by the ESA (2022) concludes that 227 million Americans played video games in 2021. The industry's breakneck expansion may be attributed to the newfound popularity of the medium, further catalyzed by not only the rapid proliferation of technology in modern-day society but also the social isolation and quarantining COVID-19 pandemic. Studies conducted by Nielsen Research (2022) conclude that the United States had the highest increase of video game players due to the COVID-19 pandemic at a record 46%.

The rapid expansion of video game participation has been apparent in all demographics. However, one commonly overlooked demographic has been women in video games. According to the ESA (2022), women made up 48% of video game players in America. Despite growing industry and demographic expansion, however, women make up only 35% of competitive video game players (Interpret, 2019), and, even less, only 5% of professionals (Hilbert, 2019). Women are discouraged from playing competitive online multiplayer video games due to toxicity, and many avoid them because of their communities (Lopez-Fernandez et al., 2019). Such discriminatory behavior affects women's degree of participation and involvement in the video

game community, which leads to an insular effect proliferating the perception of male dominance within the gaming space (Drenten et al., 2019). This phenomenon subsequently prevents the diversification of gaming culture and holds women back from enjoying a significant and expanding portion of the gaming industry. Due to the plethora of net harms caused by the exclusion of women in gaming, it is critical that research may be conducted to understand the extent to which the involvement of women in online competitive video games and their subsequent gameplay patterns are affected by their treatment in such communities.

The Historic Development of the Video Game Industry

In order to gain a better understanding of the current state of video game communities, the historical development of the video game industry must be expanded upon. The exclusionary marketing of video games in the early days of the industry became a self-fulfilling prophecy, fostering a homogenous society of male gamers and a subsequent culture in which women are poorly regarded due to their gender. Kirkpatrick explains how as the video game industry developed, it began exclusively targeting young men as their intended demographic. An analysis of gaming magazines published between 1981 and 1995 reveals that indicators of gender-exclusive advertising and appeals to masculinity were incredibly prevalent beginning in 1987, with frequent overly exclusionary statements that video games were "for men" or that good gameplay was aligned with masculine traits (Kirkpatrick 2017). A similar analysis is presented by Lien (2013) reviewing the history of the development of the video game industry. Lien reviews common marketing tactics used by gaming companies, noting numerous instances of gendered marketing for video games from the late 80s to the early 2000s. One notable example included was a *Playstation* advertisement in which a young man on a movie date is given the choice between "chick flick or bazooka", and chooses the latter. The article additionally establishes that the video game recession of 1983 led to the gaming industry pinpointing their marketing tactics towards the most prevalent demographic; young boys. Both Kirkpatrick and Lien's perspectives suggest that the video game industry has historically built an exclusive demographic of young men, with its early days shunning appeal to women for a variety of financial and cultural incentives. This resulted in the widespread social perspective that computer games are "boys toys".

Causes of Sexism in Gaming

The further development of the video game industry resulted in it splintering into genres, each with its own demographic of players. The online competitive gaming community in particular remains nearly exclusive to men (Interpret, 2019) despite the rapid expansion in demographics seen recently in other video game communities (ESA, 2022), which may be attributed to the attitudes and beliefs of those who identify as "hardcore gamers''. Vermeulen (2016), constructs a framework on how the gaming community perceives video game genres. She states that games are split into two main categories: casual and hardcore. Casual games are less committal and competitive, typically involve less violent or abrasive material, and were found to be more preferred by women. Hardcore games, on the other hand, are designed around an aspect of competition, require a significantly larger amount of dedication to enjoy, and are dominated by an overwhelmingly male playerbase. She states that video game communities perceive hardcore games to be the superior and more authentic experience in contrast to casual games, which are regarded as trivial timesinks for non-dedicated and unskilled players. Such beliefs contribute to the negative perception of women, causing them to be viewed as outsiders to both the culture and very nature of competitive games. Research conducted by Benjamin Paaßen expands greatly upon this framework, concluding that the identity of a "gamer" has been crystallized as exclusively masculine, and completely incongruous with the female identity (Paaßen, 2017).

Therefore, female gamers must choose between their female and "gamer" identities, leading to the further homogenization of the competitive gaming community and a barrier of mutual exclusivity perceived by both sides to be impassable. Additionally, women are not socially rewarded for playing games, while men are (McLean et

al. 2013). Rudman expands upon this perspective, stating that in male-dominated fields and environments, women are punished for self-promotion, such as making themselves noticed or disrupting the gender hierarchy by performing better than men (Rudman, 1998). This leads to a stigmatized female self-image as well as a stigmatized social image of female players within the gaming space (Kuss et al. 2017).

Results of Sexism in Gaming

Factors such as historical exclusion (Kirkpatrick 2017), exclusionary gamer identity (Paaßen, 2017) and a stigmatized female image (Kuss et al. 2017) culminates into a plethora of harms for women in gaming. Negative female stereotypes are widespread within competitive gaming, with women being regarded as worse players than men as well as players that exclusively play healer and other support characters (Kaye et al., 2017). These stereotypes lead to lower performance and self-confidence in female gameplay, reinforced through lower results on Implicit Association Tests and gaming task performance tests compared to women who were not exposed to such stereotype threats (Pennington et al., 2016). Additionally, the space created by exclusively male identification with the "gamer" identity (Paaßen, 2017) creates an environment in which women are frequently punished or met with some form of social or hostile aggression for performing better than male players (Kasumovic, 2015), which reinforces Rudman's (1998) research on female self-promotion in male-dominated environments. Due to such harmful stereotypes and toxic environments, women report being discouraged from playing competitive online video games (Lopez-Fernandez et al., 2019) and socially isolating from other players within competitive gaming in order to avoid discrimination (McLean et al., 2018).

Sexism in the gaming space additionally leads to widespread discriminatory actions taken against female players. A survey of over 1,500 female players by Bryter Research concludes that 69% of female players have experienced abuse from male players, with 33% experiencing it quite regularly. 40% were aggressively interrogated about their gaming skill, 39% were sent inappropriate content from male players, 38% experienced verbal abuse, and 33% were excluded from gaming participation due to their gender. In terms of behaviors exhibited in response, 37% avoid revealing their gender and 37% avoid speaking in online games in fear of discrimination (Bryter Research, 2021). A Reach3 Insights study additionally found that 59% of women avoid revealing their gender due to discrimination (Reach Insights, 2021). Bryter and Reach Insights both point towards sexism within gaming leading towards decreased female involvement, exhibited in specific behaviors and largely harmful to female experiences.

Research Gap

Research conducted by Bryter (2021) and Reach Insights (2021) points towards genres of discrimination experienced by female players. However, these studies are bound by the limitations of quantitative research. Such surveys and statistics were unable to explore specific experiences of sexism in gaming from individual participants, as well as specific actions taken by women. The statistics serve as indicators of generalized treatment that women face in the gaming space, but do not take into account specific and individual narratives that are needed to establish a greater understanding of the issue. Due to these limitations on previously existing research, more studies must be conducted that take into account the specific experiences of individual women to get a more nuanced understanding of the treatment they face, why they experience such treatment, and what they do in response to such treatment, which are all incredibly important issues for women in competitive gaming and for the gaming industry as a whole. My research will fill this gap because it will garner individual experiences through in-depth qualitative interviews in which participants will be asked to cite anecdotes for each behavior that they exhibit, as well as talk about their own experiences and sentiments in depth. This creates a more comprehensive understanding of female experiences within gaming, furthering the framework of understanding established by previous quantitative research.

Additionally, existing research only covers responses and actions taken by women in response to discriminatory treatment in a generalized sense, such as Pennington's research on decreased female performance as a result of stereotypes (Pennington et al., 2016). Such studies create a narrative of generalized discriminatory treatment leading towards decreased female involvement. However, specific actions taken by women, such as avoiding speaking or hiding their gender, are rarely researched, with specific actions taken covered only in studies conducted by Bryter (2021) and Reach3 (2021). These studies additionally only covered anywhere between one and three specific actions taken, presenting an incomplete representation of how female involvement is affected by sexism within gaming. Therefore, more comprehensive research is necessary to discover more behaviors that women exhibit in response to the sexism, discrimination, and other gender-based treatment that they experience. My research fills this gap by asking for specific actions taken as a result of discrimination. Questions in my study will pertain to not only specific behaviors established through previous research, such as women avoiding speaking in-game (Bryter, 2021), but will also use a semi-structured nature and inquire about any other specific behaviors in order to gather more information about specific behaviors.

Initial Assumptions

Initial assumptions were based on existing research and literature review. I hypothesized that women would reduce their performance due to being punished for performing well (Kasumovic, 2015). I additionally hypothesized that women would hide their gender identity to avoid discrimination, demonstrated by research conducted by Reach Insights (2021). Furthermore, women would take a more passive role in the game due to gender norms and stereotypes (Kaye et al., 2017). On top of this, women would socially isolate through exhibiting behaviors such as playing alone and refusing to make friends with other players in an attempt to avoid discrimination (McLean et al., 2018). Overall, these studies demonstrated the negative effects of gender-based discrimination on female players, so more negatively impactful behaviors were assumed to be more prevalent.

Methods

Data Collection: Semi-Structured Interviews

Semi-structured interviews will be the main method of data collection. Semi-structured interviews are interviews in which participants are asked overarching questions, with follow-up questions allowed for more in-depth exploration (Dicicco-Bloom et al., 2006). This method was chosen due to its flexible nature in giving each individual participant a voice to describe their own experiences, providing the researcher with more comprehensive information and aligning with my goal of filling the gap of in-depth experiences and anecdotes. The interview will take approximately 30 minutes and questions will be divided into two main categories. The first category will be questions regarding the treatment that the participant has received in game, highlighting their experiences in the competitive video gaming community. This encompasses a generalization of the treatment within the games themselves as well as more specific behaviors, whether it be through voice chat communication, gameplay behavior, etc. The second category will be questions regarding actions that the participant has taken as a response to their aforementioned treatment inside of the game, including overarching patterns of action as well as specific actions taken. In each category, broader questions will first be asked followed up by more specific questions about experiences. Participants will be asked for specific anecdotes to produce a more comprehensive documentation as well as individual experiences. The interviews will be conducted through the online communication platform known as Discord, as it was the most commonly used and widely recognized platform for voice calling among participants. Interviews will be recorded using the digital recording tool Streamlabs and transcribed manually for data analysis. Each participant will receive a copy of

their own transcription in order to verify accuracy and make necessary corrections.

Data Analysis: Thematic Analysis

Thematic analysis will be conducted to discover common themes between interviews, with the process of thematic analysis pointing to recurring effects of said treatment on the involvement of female players in video games (Clarke and Braun, 2013). Thematic analysis will be divided into two phases. The first phase will include extracting relevant experiences and other pieces of information from interviews as well as establishing whether or not such experiences were common between participants. In this phase, participant experiences that are irrelevant to the discussion may be omitted, and similar experiences will be grouped together. The second phase includes determining themes and labeling common and relevant experiences under themes, solidifying the categorization of the data.

Thematic analysis will be performed as the most efficient and comprehensive method to analyze and categorize actions taken as a result of such treatment from a qualitative perspective. Using thematic analysis will allow exploration of the different types of treatment that women face in the community as well as the different types in which they respond, providing a more comprehensive analysis of women's experiences gaming and types of actions taken. Determining the *types* of actions that women take as a response to the treatment they experience would fulfill the purpose of my study in examining more specific experiences and specific actions taken by women. Furthermore, similar studies in this field of research have employed thematic analysis, providing further justification. This can be seen in a study conducted by Rogstad (2021) in which female perceptions regarding esports were gathered through semi-structured interviews and analyzed through thematic analysis.

Boundaries, Definitions, and Selection of Participants

Competitive online video games are defined as games that contain a form of ranked system, where players compete against each other for the purpose of achieving a higher rank and have an established "esports" competitive gaming scene (WePlayHolding, 2021). Such games are largely populated by the demographic that Vermeulen (2016) establishes as "hardcore gamers", which aligns with both the objective of the study in examining women in competitive gaming as well as the literature review definition on what competitive gaming is. The participants selected will be narrowed down to American female-identifying players who play video games for at least 10 hours each month and have at least 30 hours of experience in one of the following titles: *Valorant* and *League of Legends*. Participants were constrained to American players due to the established significance of American women in competitive gaming while additionally taking into account America's dominance in the video game industry and its comparatively high proportion of female players (ESA 2022). *Valorant* and *League of Legends* were selected, as they are the second and third most viewed esports titles and are therefore considered representative of the competitive gaming scene (Esports Charts, 2022). Women who regularly play video games but do not have any experience with playing online competitive multiplayer video games will be excluded from the study. They would be irrelevant to the data, as the study specifically examines how women's experiences within the *competitive* gaming community affect their involvement within *competitive* gaming. One additional note of importance about this study is that the "treatment" of women being investigated is not strictly assumed to be negative; experiences interpreted to be positive, negative, and neutral will be collected and considered in data analysis. Furthermore, all genders are considered in the definition of the competitive gaming community, meaning that participants may recount interactions with male, female, and non-binary players.

Results and Discussion

From participant interviews, seven main themes of resulting actions and involvement were deduced. Before moving onto data representations showing the significance and prevalence of each theme, it is important to understand each theme and its meaning. All seven main themes garnered from the interviews and thematic analysis are presented below in Table 1.

Table 1: Themes and Definitions

Theme	Definition
Reduced Communication	Decreased types or usage of channels used to give and receive information from other players
Improvement	Actions towards increased performance in game.
Regression	Actions towards decreased performance in-game.
Party Support	Playing with friends rather than alone.
Retaliation	Female players responding to gender-based aggression with aggression.
Gendered Game Roles	Participants conforming to feminine-stereotyped roles such as healer or support.
Gender Concealment	Participants concealing their gender in-game.

Key information gathered from each participant is displayed in the following tables.

Table 2: Significant participant experiences and corresponding themes

Participant	Significant Experiences	Theme
A	After using voice chat, the participant was yelled at by male players and called sexist slurs. She now avoids using voice chat to avoid such treatment.	Reduced Communication
	Participant was verbally harassed in voice chat for being female and was called sexist slurs. In response, the participant purposefully played worse so the team would lose the game.	Regression

B	Participant was pressured by male teammates to play a healer character and was told that girls should play healers and support. Participant conformed to the pressure and plays support characters.	Gendered Game Roles
	When performing poorly and using voice chat, participant was told to stop speaking by male players and was told that women shouldn't speak, especially if they're bad. When using text chat instead, participant was identified as a woman from her in-game name and was also told to be quiet. In response, participant stopped using voice chat and communicated less in text chat, lowering communication in general.	Reduced Communication
	Participant was told by male players that women are worse than men at video games. In response, participant takes the game more seriously and tries to improve in order to disprove such negative stereotypes.	Improvement
	Participant's video game character was cornered by male teammates and killed due to the participant's gender, even though they were on the same team. This led to the participant purposefully playing worse so that her team would lose.	Regression
	Participant was playing with a male friend in the same team. When the participant was verbally harassed by another male player for being a woman, the participant's male friend stood up for her and the other male player stopped harassing her. Participant now intentionally plays more with male friends for the sake of protection against harassment,	Party Support
	When participant died in the game, she was told by a male player that it was because she was a woman and that women are bad at games. In response, she mocked and verbally assaulted the male player for the rest of the game.	Retaliation
	Male players automatically expected the participant to play a healer or support character due to her gender and subsequently picked other roles. Therefore, participant frequently has to play healer or support characters and conform to the stereotypical gender role in order to have a support character on the team and win easier.	Gendered Game Roles
	Participant has played with other female players that don't conceal their gender and states that such female players are frequently harassed. To avoid this, the participant avoids revealing their gender in-game.	Gender Concealment.

C	Participant feels pressure from the existing stereotype that girls should play support and healer characters, not damage characters. Whenever she watches a female video	Gendered Game Roles
D	game player, they are expected to play support and healer characters.Therefore, the participant conforms to the stereotype by playing support characters.	
	When speaking with voice chat, the participant was told to be quiet because she is a woman. She was then verbally harassed by male players on her team for the rest of the game. The participant therefore avoids using voice chat to reduce the possibility of this happening.	Reduced Communication
E	Participant was strongly harassed and yelled at while performing poorly by male players due to her gender. This treatment discouraged her and reduced her morale, leading to her playing worse than she would have otherwise.	Regression
	Participant used voice chat while playing poorly and was immediately told to be quiet. She was then verbally harassed and called gender-based slurs. Due to this experience, the participant uses voice chat less.	Reduced Communication
	Participant was verbally harassed by male players in-game and had her skill called into question because she was a female. The participant felt discouraged and demoralized and played worse as a result.	Regression
	Participant was playing with a male friend on her team. Participant was verbally harassed and called sexist and racist slurs by a male player. The participant's male friend stood up for her, and the other male player began arguing with the male friend instead of verbally harassing the participant. As a result, the participant intentionally tries to play with her male friends instead of alone.	Party Support
	Participant is frequently pressured by male teammates to choose support or healer characters because she is a woman. If she does not choose a support character and makes a mistake in her gameplay, she is verbally harassed and told that she should have just played the support character. In response, the participant plays support characters more frequently.	Gendered Game Roles
	Participant played a game with a female friend. The participant did not use voice chat, but she observed that when her female friend used voice chat, she was instantly sexually harassed by male players on the team. The participant subsequently avoids using voice chat.	Reduced Communication

F	Participant played a game with a male friend. During that match, other male players on their team were telling the female participant what to do during the match. Her male friend then stuck up for her and said that the other male players should be quiet and that she should play however she wants, which led to the other male teammates telling the participant what to do less. As a result, the participant plays with male friends more frequently.	Party Support
G	Participant was verbally harassed with sexist insults when playing poorly on a difficult character. In response, she picks easier characters to play because she wants to avoid being judged more harshly for her gameplay as a female. The participant states that this reduces her improvement at the game, as she only plays easy characters now.	Regression.
	Participant was told by male players to pick a healer character because the team needed a healer and girls are supposed to play healer. As a result, she was pressured into picking the healer character even though she wanted to play the damage character.	Gendered Game Roles
	Participant used voice chat in a game and was verbally harassed by male players as they repeatedly told her to stop using voice chat because she's a girl, girls are bad at games, and people who are bad at games shouldn't talk. The participant therefore avoids using voice chat as a result.	Reduced Communication
	Participant played a character that takes initiative over the team and has a large impact in the game. After performing poorly, she was verbally harassed by male players for being a girl and was told that it made sense because all girls are bad at video games. As a result, the participant does not take initiative or play aggressively in the game.	Regression

Seven different participants that played either *Valorant* or *League of Legends* were interviewed on their specific experiences with gender-exclusive treatment in-game, as well as their subsequent actions and involvement. With the semi-structured interview method, overarching questions were asked, with follow-up questions used to explore specific participant experiences. Additionally, participants were asked to recall specific anecdotes. The names of the participants have not been included in the data in order to preserve anonymity, and the alphabetical order of the participants was determined based on the order in which they were interviewed. The leftmost column of the table represents the participant. The middle column represents experiences that the participant would describe as significant to their gameplay experience. These are significant, as they are both the specific reason as well as the specific action taken by the participant regarding gender-based treatment. The third column represents themes found through thematic analysis, gleaned from such experiences. For example, for Participant A, a significant experience was described as being verbally harassed by male players for using voice chat and not using voice chat less as a result. This corresponds to the theme of reduced

communication, as the experience led to the participant restricting or limiting the amount or forms of communication used.

Table 3: Color-coded chart for participants and themes

Themes	A	B	C	D	E	F	G
Reduced Communication	green	green	pink	green	green	green	green
Improvement	pink	green	green	pink	pink	pink	pink
Regression	green	green	pink	green	green	green	green
Party Support	pink	green	pink	pink	green	green	pink
Retaliation	pink	green	pink	pink	pink	pink	pink
Gendered Game Roles	green	green	green	pink	green	green	green
Gender Concealment	pink	pink	green	pink	pink	pink	pink

The purpose of table three is to condense the information documented in table two in a more concise format. Through this table, it is easier to identify recurring themes among participants, as well as themes that were not as common.

Specific anecdotes and experiences of gender-based treatment in gaming as well as actions and involvement patterns taken by women in response to such treatment were collected from seven participants. Experiences collected through interviews were grouped by similarity and categorized into themes. With the prevalence of certain themes over others, it is critical to examine the frequency and importance of each theme. Such analysis may deduce the most common and significant actions taken by female players in response to gender-based treatment. This section will analyze such themes and participant experiences while putting them into conversation with conclusions drawn from previous literature. Out of the seven themes deduced from thematic analysis, only three themes were consistently identified by participants, with a majority of participants identifying such themes in their experiences. These three themes were the themes of reduced communication, regression, and gendered game roles.

Common Theme 1: Reduced Communication

Reduced communication tied for the most common theme with the theme of regression, with six out of seven participants, Participants A, B, D, E, F, and G, identifying each theme. Defined by table one, reduced communication is decreased types or usage of channels used to give or receive information from other players as a result of gender-based treatment. Typically, participants experienced verbal harassment as a result of using voice chat, and therefore stopped using voice chat in order to reduce the probability of receiving harassment. This pattern was identified by participants A, B, D, E, and G. Participant F served as an outlier, as she did not use voice chat or receive harassment due to using voice chat but instead was afraid to use voice chat in the first place due to harassment that she observed towards a female friend. Participant F's experiences imply that gender-based discrimination against women in regards to voice chat is strong enough to scare women into reducing their communication in-game regardless of whether or not they directly receive harassment or discrimination. The overall prevalence of this theme reinforces existing research on female self-promotion in male-dominated environments (Rudman, 1998), since as a result of speaking up and making themselves heard, women were faced with increased aggression and harassment. Participant A elaborates on this common experience, stating,

"When the guy was being mean, I just like stopped communicating with voice chat completely. And like, only used like text chat. I only tried to use like, voice chat once after that. And then they started like yelling again."

As the theme of reduced communication was identified by six out of the seven participants, one may conclude that reduced communication is one of the most common and significant behaviors that women exhibit as a response to gender-based discrimination in competitive video games. Most experiences were very similar, with one outlier being Participant F and the rest of the participants stopping the usage of voice chat after experiencing verbal harassment. This suggests that not only is reduced communication common, but the experiences leading to reduced communication as well as the exact method of stopping voice chat that women employ are largely homogenous.

Common Theme 2: Regression

Similarly to the theme of reduced communication, six out of seven participants identified the theme of regression in their experiences. As defined in table one, the theme of regression pertains to actions towards decreased performance in-game as a result of gender-based treatment. Typically, discouragement and harassment from male players led to participants playing worse, either intentionally or unintentionally. The discouragement and harassment from male players ranged from being called sexist slurs (Participant A), having their gaming skill belittled (Participant E), being yelled at (Participant D), and even gameplay-based harassment such as having their character cornered or killed by their own teammates (Participant B). Actions taken by female players could be grouped into one of two responses. The first response is playing worse unintentionally due to demoralization or fear, which was identified by Participants D, E, F, and G. The second response is playing worse intentionally in order to make the entire team lose, identified by Participants A and B. The response of unintentional regression was identified more commonly, exemplified by Participant F's statement:

"I would sort of, by default, take something that would be easier for me to play, just because I don't feel comfortable challenging myself, because I feel like there's an expectation that failure is critiqued a lot harsher for girls."

Overall, participants A, B, D, E, F, and G identified this theme. Its commonality suggests that regression is one of the most prevalent and significant actions taken by women in response to gender-based discrimination. Additionally, there are a wide range of causes for participants exhibiting this behavior, meaning that although this response is ubiquitous, there are a variety of causes behind it. The existence of both intentional and unintentional regression additionally suggests greater variety in participant experiences and behavior. This data reinforces past research on negative stereotype effects, confirming the conclusion that exposure to stereotypes regarding poor performance leads to the reality of poor performance (Pennington et al., 2017). This refutes my initial assumption that women would reduce performance due to being punished for performing well based on research conducted by Kasumovic (2015). Although women did reduce their performance, it was largely due to stereotype threat and belittlement rather than being punished for performing well. Such low performance as a result of negative stereotypes holds significance, as it further reinforces stereotypes such as women being worse at video games or only being able to play easy support characters (Kaye et al., 2017).

Common Theme 3: Gendered Game Roles

Gendered game roles was the second most commonly identified theme, as it was identified by five out of seven participants. Table one defines the theme of gendered game roles to be participants playing feminine-stereotyped roles such as healer or support. Typically, participants were told and directly pressured by male teammates in-game to pick characters that conformed to these stereotypes. In response, participants would pick these characters regardless of whether or not they wanted to play them. This pattern was identified by Participants A, B, E, and F. Participant C served as an outlier, as she conformed to gender-based role stereotypes without direct pressure from male players. Instead, the pressure that she experienced was from the pre-existing stereotype that women should play support and healer; every time she watched a female video game player, they were expected to play such characters. The most common pattern of direct pressure is elucidated by Participant E:

"I almost always follow the stereotype… I feel uneasy playing other roles because if I play a character meant to get kills and I'm still trying to get the hang of it they'll be like 'of course the girl picks duelist and sucks' and 'girls should stick to support' and they always tell me to pick a support character whenever I join a match."

In total, Participants A, B, C, E, and F identified this theme, indicating its significance as well as its prevalence. Data gathered from interviews supports existing research on the presence of gender norms within gaming (Kaye et al., 2017). Since characters that are classified as support or healer characters are typically much more passive and much less assertive than damage-based characters, this data supports my initial assumption that women take a more passive role in-game due to gender norms (Kaye et al., 2017) These conclusions coincide with existing studies regarding the negative effects of the stereotype threat. In the same way that women play worse as a result of stereotypes that they are naturally worse players (Pennington et al., 2016), women play support and healer characters as a result of stereotypes that those roles are for women.

Limitations

Before conclusions are expanded upon, it is necessary to discuss limitations of the study. The first limitation is the possibility of researcher bias. As the researcher conducting this study, I am an avid participant in competitive gaming and have personal experiences observing gender-based discrimination in the competitive gaming community. This creates the possibility of confirmation bias, in which data could have been gathered and analyzed to match my personal biases instead of providing an unbiased and comprehensive perspective. Another

limitation was the sample size. As previously mentioned, the semi-structured interview took approximately 30 minutes to complete for each participant. Due to the unwillingness of possible participants in conducting an interview of such length, the sample size was only seven, which may have negatively affected the representativeness of the study. Although the method of research was qualitative, a sample size of seven may not serve as comprehensively representative of all female competitive video game players. Furthermore, human error in participant recollection of experiences as well as human error in transcribing and analyzing data, although unlikely, have the possibility of providing skewed pools of information.

Conclusions

The study concludes that sexist discrimination in competitive gaming leads to maladaptive response mechanisms that result in harmful gameplay patterns in female players. Such patterns decrease the overall involvement of women in competitive gaming and holds them back from full participation. This conclusion is supported by reduced communication being the most common theme, indicating that key features of competitive gaming such as voice communication are self-restricted by female players in order to mitigate harassment. Results of this study additionally suggest that stereotype threat (Pennington et al., 2016) is the biggest factor leading to lower gameplay performance as well as conformity to gender roles in female players. Participant experiences reinforce the initial assumption that women will take a more passive role due to gender norms (Kaye et al., 2017) due to conclusions gleaned off of the theme of game roles. On the other hand, the initial assumptions of reduced performance as a result of women being punished for performing well (Kasumovic, 2015), women hiding their gender identity to reduce discrimination (Reach3 Insights, 2021), and women socially isolating (McLean et al., 2018) were all refuted by conclusions of the study.

The results of response patterns exhibited by female players in this study have great implications for the future of gender equality in competitive gaming. First, results suggest that gender-based discrimination and harassment is most common when women communicate through voice chat or play characters that require initiative and aggression within the game. Secondly, results suggest that stereotype threat is the main factor leading to decreased gameplay performance as well as limitations on game roles played by women. Furthermore, the results differentiate between female adaptive gameplay patterns that are incredibly restrictive, such as reduced communication, and patterns that are minimally restrictive, such as party support.

Considering the results of this study, competitive gaming companies may create more comprehensive systems to mitigate harassment and exclusion experienced by female players. With party support being an existing theme as well as an effective and minimally restrictive harassment mitigation strategy throughout participants who identified it, companies may encourage players to stand up for other players who experience harassment. Companies may possibly create rewards systems based on "honor" that grant virtual rewards to the player based on protecting other players against discrimination and harassment in chat logs, voice chat, and other forms of communication. As decreased communication and regression were the two most common themes synthesized from participant interviews, systems established by developers should encourage more women to participate and communicate actively within such games, garnering confidence and greater involvement due to lower levels of active harassment and discrimination. Subsequent outcomes for women may work towards increasing gender-based inclusion and diversity within the competitive gaming community and decreasing historical discrimination. Future research in this area should apply the findings of this study in creating initiatives, programs, and social movements that decrease stereotype threats and result in women being able to employ non-restrictive adaptation strategies to combat discrimination in order to work towards the goal of making such maladaptive coping mechanisms obsolete in the gaming space.

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