

# **Gaming Culture Leading to Gender Exclusivity in Video Games in the US**

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

## **ADVISORS**

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Video games offer a broad range of benefits, including allowing players to forge connections with people across the globe, sharpening cognitive skills through problem solving challenges, and providing educational advantages, particularly in STEM fields. Video games have become a staple in American society with nearly two-thirds of American homes having at least one member who plays video games regularly ("Video Game History," 2017). In 2020, the video game industry saw \$36.9 billion in revenue (Lindner, 2024). However, a closer look reveals that only 39% of these purchases were made by women (Clement, 2023). Exploring the reasons behind this gender imbalance isn't just about gaming. According to a recent study, owning a video game console at home had a positive academic effect in STEM courses for students (Bustamante-Barreto et al., 2022). By delving into why women may not be as invested in video games as men, we not only gain insight into consumer behavior, but we also open doors to fostering greater inclusivity in STEM disciplines, leveraging the potential of an industry that shows no signs of slowing down.

This paper examines the multifaceted contributors of the gender imbalance in video game participation, focusing on the reinforcing cycle of gender stereotypes instilled through children's toys, the underrepresentation in video game development and marketing, and the prevailing misogynistic culture within gaming causing mental health issues for women. This analysis provides the social and psychological context regarding the reasons as to why this disparity exists and applies the theory of Social Construction of Technology to examine the relationship between society and video games (Klein & Kleinman). The paper then discusses the implications of having only certain genders included and welcomed into gaming culture and how to mitigate the implications.

Deep-rooted cultural norms and socialization patterns related to children's toys contribute to the gender disparity observed in video game participation. Professor Blakemore, a distinguished researcher at Purdue University with a primary focus on the development of gender roles, carried out an extensive analysis of over 100 children's toys and their association to gender. Professor Blakemore collected over 100 toys and classified them to indicate the degree to which they were associated with femininity and masculinity. These toys were divided into 5 categories ranging from (1) strongly feminine, (2) moderately feminine, (3) neutral, (4) moderately masculine, and (5) strongly masculine. The research found that the "toys most associated with boys were related to fighting or aggression, and the toys most associated with girls were related to appearance" (Blakemore, 2023). This included toys such as soldiers, guns, and wrestlers for boys and Barbie dolls, makeup, and jewelry for girls. Further research found that girls' toys were affiliated with "physical attractiveness, nurturing, and domestic skill" and boys' toys were "rated as violent, competitive, exciting, and somewhat dangerous" (Blakemore, 2023).

Boys are often encouraged to engage with toys associated with technology, competitive sports, and risks, which mirror the competitive and aggressive themes in many video games, whereas girls are directed towards activities that have underlying themes of domesticity, nurturance, and cooperative play, which are less aligned with mainstream gaming culture (Hartmann et al., 2006). Hartmann and Klimmt, researchers who published a paper in the *Journal of Computer-Mediated Communications*, found that "female respondents were less attracted to competitive elements in video games, suggesting an explanation for gender-specific game preferences" (Hartmann et al., 2006). The researchers suggest that there may be a correlation between the toys introduced to people as children and interests as adults.

So why might companies market their toys differently to young kids, some may ask. The toy industry skyrocketed from the mid 1970s to the mid 2010s with the market being around \$2 billion at the end of the 70s to being slightly over \$19.4 billion by 2015. It is argued that toy companies can profit by placing gendered stereotypes on toys in the marketplace so that they can sell one version of a toy for girls and a different version for boys, thereby reinforcing gender disparities from a young age (Sweet, 2012). On children's networks like Disney and Nickelodeon, 85% of toys marketed for boys were color coded with red, black, gray, and brown and almost all of the pastel-colored commercials depicted "girls only" toys. Child development experts agree that play is not purposeless, but functional. Toys stereotyped for boys are associated with action, risk, adventure, and sport, once again more closely aligned to modern popular video games ( Murnen, 2018).

Societal norms actively shape technological products, such as video games, and their consumption. This is a direct reflection of SCOT's premise of how technology does not determine human behavior or action but rather the contrary. The high usage of video games from certain genders can not be fully understood without considering the social context, which in this case is understanding the social norms instilled through children's toys at a young age.

One way to mitigate the issue of gender discrimination in toys is to urge toy manufacturers to strive for gender neutral toys. Manufacturers should aim for toys to fall into Professor Blakemore's 2-4 toy range, toys that are moderately feminine, neutral, or moderately masculine. This is a first step towards gender neutral gaming. Additionally, lawmakers around the country can follow in the steps of a California lawmaker, Evan Low, who co-authored the bill that fined large retail chains that continue to promote "the proliferation of science, technology, engineering and mathematics-gear'd toys" for only the boys sections while discouraging the

same pursuit for girls (Stiastny, 2021). This law requires large retail stores in California to have a gender neutral section for toys and childcare items. Although these actions will not completely solve the issue of childrens toys being gendered, it's the right step to minimize the disparity between video games participation.

Another factor that contributes to the gender imbalance in video game participation is lack of gender diversity in video game development and marketing. According to a survey conducted by the International Game Developers Association during the years 2014 to 2021, women only compose 30% of workers in the video game industry (IGDA, 2021). Often, even within these industries they are directed to the roles that are traditionally more feminine such as “project management even if they prefer technical work, due to assumed interpersonal and organizational skills”, which are considered more feminine skills (Prescott, 2011). In the gaming industry, where the workforce is predominantly male and heterosexual, the convergence of these identities sways character game design, narrative framework, and animation. Martin and Tompkins argue in a paper published by the Journal of Games and Culture that “stereotypical and status quo character designs were historically institutionalized as normalized practices, aided by a largely homogenous (i.e., mostly male and mostly white) labor force” (Tompkins et al., 2022). The lack of gender diversity in these spaces creates design tools that are wielded in service of heterosexual male pleasure. This is showcased as a concerned female worker becomes “hesitant to voice her concerns about a female protagonist shown in her underwear” (Tompkins et al., 2022).

The “male gaze” refers to a phenomenon where the media showcases the world and women from the eyes of a heterosexual male perspective, emphasizing women as objects for male desire (Snow, 1989). The combination of this phenomenon and male centric video game

narratives serve as symbolic violence against women by means of their objectification. It may explain why many participants were not conscious of the salient difference in how characters are designed across genders. This shows how the cyclical nature of objectifying women in the gaming industry continues.

The predominance of male developers in the gaming world has shaped how games are produced, including storyline development and character designs, often implementing a male-centric perspective into everyday games. The lack of gender diversity in the development world makes gaming less appealing to potential female gamers. The effects of the lack of diversity extend beyond content creation but also create barriers to entry for aspiring female developers. There are many systematic barriers such as early childhood education, hiring practices, workplace culture (Merayo et al., 2022).

Addressing the gender imbalance in STEM as early as high school and college is a start to ensuring broader inclusivity in the video game industry. In 2021, women made up only 22.1% of all undergrads awarded Engineering and Computer Science degrees in the US (Coolick, 2022). If women are not encouraged or welcome to pursue careers in STEM, the fields will lose out and potential talent and contribution of nearly half the population. This perpetuating cycle limits gender diversity in development teams and, by extension, the diversity of game narratives.

Beyond game development, women occupy limited roles in video game marketing. The Electronic Entertainment Expo (E3), one of the most prominent annual gaming conventions in America, had its record low female representation in 2014. Over 45,000 people descended to the city of Los Angeles to uncover the latest video games set to release in the upcoming year. Among the various representatives, only a single woman took the stage to speak, and to make matters worse, her presentation only lasted two minutes (Sydell, 2014). Feeling unseen in these

real world spaces reinforces the notion that certain people don't belong in the world of gaming. In the same given year as the one female spokesperson, from all the video games showcased at the E3 in 2014, only 9% had female protagonists (Sydell, 2014). Representation in the distribution and marketing of games is just as important as those who produce it. To mitigate these issues in the future, conventions such as the E3 should impose diversity and inclusion initiatives that target recruitment strategies to increase representation for various underrepresented groups.

It is crucial to understand that video games do not inherently attract one gender over the others, but rather, this gravitation towards certain groups is largely a result of human choices and decisions through the development and distribution process as SCOT suggests. From the conceptual design phase to marketing strategies, choices made by developers, advertisers, and other stakeholders play a pivotal role in shaping the ways video games are shaped and presented. If the gaming industry diversifies its development teams for the production and distribution for video games, it will have the potential to challenge and rethink the norms and practices that historically have shaped video game culture.

The culture of toxic masculinity in gaming leads to adverse effects on cognitive and emotional development in women, resulting in fewer female gamers. While gaming offers numerous benefits, it can also perpetuate stereotypes, particularly against women. By examining how the sexualization of female characters and gender based harassment within video game culture contributes to mental health issues and discrimination against women, these findings can be a catalyst for change within the community (Black, 2017). Not only does understanding how these issues negatively affect cognitive and emotional development in women, but it could also suggest why there is a gender imbalance when it comes to video game participation.

The portrayal of women in video games often leans towards hypersexualization, which exaggerates female attributes like having larger breasts, wider hips, and thinner waist to appeal predominately to male gamers. Grand Theft Auto, a popular video game released in 2014, made headlines after a “user pays a prostitute for sex, which happens in graphic footage, then punches the woman to the ground” (Allen, 2014). If users don’t already find that appalling, according to the American Psychological Association, sexualization of girls negatively affects cognitive and emotional consequences development in women (Black, 2017). Sexualization and objectification compromises a person's confidence in and comfort with their own body. This results in emotional distress and self-image problems, such as shame and anxiety (Black, 2017). This depiction not only skews the perception of women for men, but to women as well. This portrayal not only misrepresents women but also affects female gamers’ self perception and mental health. In the United States the “differences between female body sizes in the media and actual body sizes have been linked to eating disorders, low self-esteem, body dissatisfaction, and feelings of objectification” (Downs et al., 2010). Researcher Christopher Near found that video game sales from 2005 to 2010 had a positive trend related to sexualization of non-central female characters among video games with women present (Near, 2013). This is yet another example of the video game industry catering towards a broader male audience. These unrealistic beauty standards and expectations of women’s bodies are tailored for the male gaze.

Within gaming culture, discrimination and harassment towards women has become normalized and even deemed unavoidable. Studies have shown that female gamers are more likely to receive negative interactions during gaming sessions (Wong, 2023). Studies show that prerecorded audio tracks of female gamers were three times more likely to receive negative interaction than their male counterparts (Wong, 2023). While these examples don't directly stop



women from playing these video games, they often deter women from participating in video games for the sake of their own mental health. Even as women overcome real-world obstacles to engage with video games, the gaming culture itself presents additional challenges. To avoid this unwanted harassment, researchers from the Front Psychiatry Institution found that female gamers have strategically chosen characters that are male presenting and avoid disclosing their gender identity to avoid unwanted aggression (Lopez-Fernandez et al., 2019). This reflects the broader issues of gender discrimination and one that not only pushes women away from the gaming scene but perpetuates a cycle of exclusion and marginalization. This harassment can extend beyond the digital realm and can cause real life implications regarding mental health.

The issues reflected in the gaming world reveal a deeper issue regarding societal attitudes towards gender. Beck et al. (2012) from the Journal of Interpersonal Violence found that sexual violence in media reduces sympathy toward rape victims (Beck et al., 2012). Furthermore, the study found that a video game depicting sexual objectification of women and violence against women resulted in statistically significant increased rape myths acceptance. Rape myth acceptance is the attitude and generally false belief about rape that serve to deny and justify male sexual aggression against women (O'Connor, 2021). When narratives such as the rape myth are presented to society, it is essential to reflect on how it might marginalize and disproportionately affect certain groups of people. The perpetuation of hypersexualized women and acceptance of bullying and harassment can have larger societal implications that can influence real life interactions and perceptions. Cognitive load theory suggests that processing demands if engaging with sexualized content can inhibit the ability to counteract stereotypes that reinforce negative sentiments towards women (Beck et al., 2012). This indicates a need for addressing how the video game industry contributes to societal discourse on gender and violence. To mitigate the

effects, it's important that the gaming industry acknowledges how the representation and treatment of women in video games can be harmful.

Creating content that respects women and diversifies the characters on screen will promote gender equality within the gaming world. Moving forward developers have a crucial role when it comes to challenging the stereotypes to actively reduce harassment and create a more inclusive environment. Video games provide a range of benefits and it's critical that everyone has the opportunity to engage with them. The challenges faced by women in gaming are deep rooted and interconnected. From early childhood, societal norms dictate distinct paths for boys and girls, steering them to have different interests and aspirations. Toys aimed for boys often emphasize math, science and technology, subtly nudging them towards careers in the STEM fields as they get older. This cultural conditioning along with many others in American society contributes to the predominance of men in STEM industries, especially software development. Consequently, gaming companies, shaped largely by male influence, make decisions in characters and other narratives that favor the male-centric perspective, imposing the male gaze. This is evident in the portrayal of female characters, which frequently leans towards sexualization and objectification. Such representation not only distorts young girls' and women's self perceptions, but also causes serious cognitive and emotional development in players.

Video games, as a technological artifact, are not inherently gendered but become so through human decision in development, marketing, and cultural practices. To further understand the imbalance in participation, it is vital to deconstruct the social contexts within which these technologies are developed and deployed. By recognizing that video games are socially constructed, it opens the door for potential change. SCOT argues that the development of technology is a reflection of societal norms that have the power of challenging or reinforcing

these norms. Addressing the gender imbalance is a step towards greater social change. By applying the theory of SCOT, we can dismantle the stereotypes that limit participation in gaming, and by extension, in STEM fields.

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