Exploring Hypersexualization in Video Games: A Literature Review of Female Characters

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Abstract. The main aim of this paper is to improve the understanding of the representation of female characters in video games, focusing on the issue of their hypersexual representation. To achieve this, a literature meta-analysis was conducted, which included searches in relevant academic research databases: WoS, Scopus, IEEE, and ACM. A total of 19 papers were identified in the literature meta-analysis. The results, aligned with the two research questions outlined in this paper, show that female characters in video games have been predominantly hypersexualized over the last decade, are targeted at a male audience, and are often portrayed as sexual objects, victims, or in passive roles. Such portrayals have a negative impact on perceptions and attitudes towards women in the gaming community and reinforce gender stereotypes. They are also linked to self-objectification among female gamers. However, recent trends show a positive development towards more realistic representations and strong female protagonists who actively contribute to the storyline, as well as an increasing number of main female characters in popular games

Keywords. female characters, hypersexualization video games

1 Introduction

In today's culture, video games are more than just a form of entertainment and leisure activity that was once thought to be reserved mainly for the younger population. The video game industry is rapidly following technological changes and trends in the software industry and artificial intelligence, with the aim of improving the personalization of the gaming experience for players (Paraschos & Koulouriotis, 2023). According to *Technopedia*, the global video game industry reached a total value of US\$184.0 billion in 2023 (Mascellino, 2024), and the video game market is forecast to reach US\$282.30 billion in 2024 (Statista, 2024a).

Video games have a number of positive influences in different contexts. For example, they have a strong impact on education and change teaching and learning activities (Toh & Kirschner, 2020). Video games such as *Minecraft* can also serve as a backbone for the adoption of 21st-century 4C skills in virtual environments: critical thinking, creativity, collaboration, and communication (Hewett, Zeng, & Pletcher, 2020). In marketing, video games offer ingame advertising (Abbasi, Rehman, Hussain, Ting, & Islam, 2021) that influences consumer behaviour and purchasing decisions.

The number of active video players (users) in 2023 was 2.42 billion and is expected to rise to 3.02 billion by the end of 2029 (Statista, 2024b). As influential media, video games affect popular culture (Desoniq Studio, 2023) and reach a large number of users worldwide. Therefore, the creation of effective storylines, main characters and the promotion of positive values in video games have the potential to break down stereotypes in society and overcome intercultural barriers in real life (Shliakhovchuk & García, 2020).

Statistics reveal that men made up 53% of gamers in the US in 2023, compared to 46% of female video gamers (Howarth, 2024), highlighting the strong interest of women in gamingAccording to this year's Entertainment Software Association (ESA) report, which covers the American population, 190.6 million respondents play video games every week. Thanks to the widespread use of mobile devices and the availability and affordability of the internet, 78% of gamers are mobile device users, while 90% participate in some form of online gaming (Entertainment Software Association, 2024). The ESA's study is of great value to the gaming industry as it provides a longterm insight into the changes in the number of female and male gamers over the last two decades. In 2004, female gamers made up less than 40% of the total number of players. This trend continued until 2012, when the proportion of female players rose to 47%, while the proportion of men was 53%. After 2014, according to ESA data, the number of women in the

gaming community drops to around 40%, but by 2022, the difference between women and men is back down to less than 10%, similar to 2014 (Entertainment Software Association, 2024).

It is important to emphasize that the data presented pertains to the United States; however, similar trends in narrowing the gap between the number of male and female players have also been confirmed by other studies and reports (see for example, UK statistics (Statista, 2024c) or growing number of female players in Asia (Niko Partners, 2023)). Despite growing interest, around 50% of female gamers are not interested in multiplayer games (Deloitte, 2024) and almost seven in ten female gamers play video games on their smartphones (YouGov PLC., 2023).

Although there is growing interest among women in video games, research on gender differences in the context of video (computer) games provides a valid reason why the role of women as players, game developers, or characters in stories continues to be suppressed. Female gamers frequently face gender-based, racial, and other forms of harassment within gaming environments. Gaming communities often propagate stereotypes that undermine women's competencies in shooter and action video games, subjecting them to insults during live streaming on platforms like Twitch (Ruberg, Cullen, & Brewster, 2019).

A comprehensive global study shows that in 2021, 30% of those working in professions related to video game development were women (Statista, 2024d). The results of the same study indicate that this percentage was 21% in 2014. Some of the issues women face in the game development industry include feeling like they don't belong in the traditionally male culture, feeling undervalued, being insulted, and other challenges (Drummond, Salgado, & Viterbo, 2022). The underrepresentation of women in the game industry opens up space for male domination in game development, which determines what types of games are produced and how the characters in the storyline are designed.

Popular games and gaming culture often promote hyper-masculinized protagonists (Sarda, Zerhouni, Gentile, Bry, & Bègue, 2022), making female characters less frequently depicted as main characters and more often in secondary roles (Lynch, Tompkins, van Driel, & Fritz, 2016; Miller & Summers, 2007). Female characters in games are often dependent on male characters. Another significant concern is the hypersexualization (Anupama & Chithra, 2022; Lynch et al., 2016) and objectification (Sarda et al., 2022) of female characters in video games. As cited from Cote (2020, p. 5): "...women continue to struggle with hypersexualized female characters, games that lack playable female characters...These behaviours and themes work to relegate women to the margins of gaming rather than allowing them to enter the cultural core."

The main aim of this paper is to critically examine the portrayal of female characters in video games, with focus on gender stereotypes hypersexualization of female protagonists. negative effects of such representation are also examined and discussed in relation to the gaming community's attitudes towards female video game players and the self-perception of women in games. The paper is organized as follows: After an introductory section, female characters are analysed within the context of relevant theories. The development of the most prominent female protagonists in video games is presented, highlighting positive examples in the face of the negative effects of hypersexualization in video games. After explaining the motivation and research questions, the process of a literature meta-analysis is presented. The core of the paper focuses on the results of the two research questions. The conclusion summarizes the main findings and outlines future guidelines for research, practice, and the gaming community in relation to female characters in video games.

2 Portrayal of female characters in video games

In this section of the paper, relevant theories related to understanding the problem are discussed. Additionally, significant female characters are described and analyzed in the context of the evolution of their representation in video games.

2.1 Theories explaining portrayal of female characters in video games

In the existing literature, the problem of stereotyped and hypersexualised female characters in video games is explained with different theories from media studies, gender studies and psychology.

Cultivation theory, proposed by George Gerbner and Larry Gross, suggests that long-term exposure to media content, in this case, video games, can influence users' perceptions of reality (Martins, Williams, Harrison, & Ratan, 2009). For example, if a gamer is exposed to sexualized and objectified portrayals of female characters in supporting roles from a young age, this exposure can potentially shape the gamer's views on gender roles and reinforce sexist attitudes.

According to the assumptions of Laura Mulvey's male gaze theory, main characters in video games are often created as visual spectacles primarily from a heterosexual male perspective. Female characters in these games are typically portrayed as objects of male desire and are depicted in passive roles (Lavrador, 2023). Furthermore, female characters are often portrayed with hypersexualized characteristics and possess weaker abilities or powers compared to male characters.

Based on the assumptions of cultivation theory and the social-cognitive theory of mass communication, Dill and Thill (2007) emphasized that gender representations in media significantly influence people's perceptions in real life. For example, the hypersexualized portrayal of female characters in video games reinforces stereotypes about male and female roles and relationships, portraying women as weak, submissive, and often as objects (Dill & Thill, 2007).

According to Fox et al. (2015), objectification theory, proposed by Fredrickson and Roberts in 1997, explains the problem of hypersexualized portrayals of women in video games. This theory suggests that women's exposure to sexualized depictions in media leads to self-objectification.

2.2 Evolution of female characters in video games

Even in the early days of video games, characters without a defined gender, such as *Pac-Man*, were explicitly portrayed as male. Later, in 1982, the character of Ms. Pac-Man was created for a popular arcade game to potentially attract more female players and increase the game's appeal (Kirkpatrick, 2017, p. 461).

Although the entire *Legend of Zelda* series is named after her, Zelda is never the main character or heroine of the various games. In different game stories, the female characters are passive, while the male characters are heroes who save them based on their skills and abilities. The story is told from a predominantly male perspective, and the female characters, as princesses, reflect the so-called "damsel in distress" stereotype (Pugh, 2018).

One of the first examples of a female character in video games is Lara Croft, the capable protagonist in the 1996 game Tomb Raider. With her distinctive characteristics and personality, Lara Croft breaks stereotypes about female roles and portrayals in video games. The appearance of a strong female character in an action video game is known in culture and literature as the "Lara phenomenon" (Engelbrecht, 2020; Jansz & Martis, 2007). This term refers to the portraval of the female protagonist as strong and competent. In the early stages of the game series, Lara Croft was portrayed as an action figure with distinctly feminine features. As the series evolved and new editions were released, Lara took on a more realistic body size, was dressed more appropriately, and was portrayed as a non-sexualized woman (Cross et al., 2024).

Aloy, a female character from the video game *Horizon Zero Dawn*, embodies a young woman growing up alone in a post-apocalyptic world (Woolbright, 2018). The game follows her journey, and the story is based on feminist perspectives. The female characters in this game are not overly sexualized, helpless, or passive (Brusuelas, 2021). Aloy is portrayed realistically in terms of her

appearance and is a distinctive character characterized by combat training, strong leadership skills, emotional intelligence, and negotiation abilities.

Jill Valentine represents a female protagonist in *Resident Evil*. She is brave, smart, loyal, and skilled with weapons due to her military experience (Lewis, 2024). Regarding her appearance and clothing, she typically wears cargo trousers or combat-ready outfits suitable for her missions. However, in the third installment of *Resident Evil*, she wore a short skirt and knee-high boots, hinting at a certain level of sexualization.

The creators of the video game Assassin's Creed Odyssey designed Kassandra as a protagonist whom players can choose to play as. She is portrayed as strong and muscular, vet at the same time gentle and emotionally intelligent (Lance, 2018). However, players are not limited to choosing her, as her brother Alexios is also available as a playable character. It is important to note that both characters are not portrayed in a sexualized manner and are appropriately dressed according to the game's context, even though some parts of their bodies are exposed (The Odyssey of Woman Representation, 2021). Although the creators of the game, Ubisoft Quebec, developed Kassandra and Alexios as equally competent characters and designed them independently of gender, statistics show that the male protagonist was the more common choice among players; only a third of the players chose a female character as the protagonist (Duckworth, 2018). This was despite the fact that the Kassandra character provided a better gameplay experience, as reported by players.

More recently, the video game *The Last of Us* features a protagonist named Ellie, a young girl who is brave, smart, and capable, guiding an older male character, Joel, through challenges in a post-apocalyptic world (McCullough, Wong, & Stevenson, 2020).

3 Research problem

A review of the literature found that the hypersexualized portrayal of female characters in video games discourages women from participating in gaming (Lynch et al., 2016). For this reason, women tend to choose games that do not feature hypersexualized characters or avatars, but rather have strong female protagonists. In the context of video games, avatars of characters meant to be human-like are often portrayed as objects or somehow dehumanized due to the digital nature of their image representation (Fox et al., 2015, p. 351). Cross et al. (2024) have highlighted two main issues regarding women in video games: the relationship between female protagonists and the way they are portrayed.

Overly sexualized portrayals of female characters, restricted or repressed behaviors, and characterizations of female characters in video games negatively impact

the treatment of issues related to gender discrimination. The identified imbalance between female and male protagonists exacerbates this problem (Cross et al., 2024). The enjoyment and immersion of a game are related to the player's ability to identify with the main character (Heron, Belford, & Goker, 2014). Therefore, the lack of female protagonists in video games reduces the applicability of this experience for women. Selfobjectification could explain the association between video games, body image disorders, and gender stereotyping, especially in adolescents. However, sexualized female avatars affect all players, regardless of gender and gender identity (Vandenbosch et al., 2017). Based on the introductory section and the issues highlighted in the literature regarding the portrayal of female characters in video games, this research addresses two key research questions (RQs):

RQ1: What are the typical representations and roles assigned to female characters in video games?

RQ2: How do sexualised and stereotypical female characters influence the general attitudes and perceptions of women towards games, as well as the attitudes and perceptions of other players towards females?

4 Methodology

To answer the two research questions for metaanalysis, a literature search was conducted according to the guidelines of Kitchenham and Charters (2007). In order to find relevant papers, four recognized scientific research databases were included in the search: Scopus, ACM, Web of Science (WoS), and IEEE.

The keywords used for the database search were chosen to target relevant areas related to the research problem: (1) the representation and issues related to women, (2) a focus on sexual themes, including sexualization and hypersexualization, and (3) the specific context of video games and online gaming. For each academic research database, the query was customized with a Boolean operator and a combination of keywords to refine the scope of the search. An example of a query with keywords and operators used for searching in IEEE was: ("Woman" OR "Female") AND ("sex*" OR "sexual*" OR "hypersexual*" OR "sexualization" OR "hypersexualisation") ("video gam*" OR "gam*" OR "internet gam*"). The search was limited to journal articles and conference papers published in English between 2014 and 2024 and was conducted in May and June 2024. The initial searches returned the following results:

Scopus: 404 papersACM: 329 papersWoS: 283 papersIEEE: 47 papers

The next step in the literature search was to identify relevant papers by reading the title, abstract, and keywords. If a paper appeared to be relevant to the topic of the literature search, its data (title, authors, year of publication) were added to a common list of identified research papers for all scientific databases. After a detailed screening process, this step resulted in a list of 71 relevant research papers. After duplicates were removed, 63 research papers were downloaded and read in full. This step was crucial to determine whether the topic of each paper was relevant to the research problem and research questions. Papers dealing exclusively with females in gaming phenomena, characters in virtual realities, or issues related to gender differences in gaming style were excluded from the final analysis. Finally, the sample for the exploratory literature analysis comprised 19 relevant papers on the topic of the hypersexualization of female characters in video games. A list of the papers included in the meta-analysis is shown in Table

Table 1. Papers included in the meta-analysis on female representation in video game

	Authors and year
1	Ansari, R., Jaffar, B. A., Riaz, S., Kaur, M. J., &
	Mushtaq, A. (2019)
2	Anupama, K., & Chithra, G. K. (2022)
3	Blomquist, G. (2021)
4	Cross, L., Kaye, L. K., Savostijanovs, J., McLatchie,
	N., Johnston, M., Whiteman, L., Atherton, G.
	(2024)
5	Davies, B., Headleand, C. J., & Hicks, K. (2020)
6	Gao, G., Min, A., & Shih, P. C. (2017)
7	Heron, M., Belford, P., & Goker, A. (2014)
8	Hollett, R. C., Morgan, H., Chen, N. T. M., &
	Gignac, G. E. (2020)
9	Lynch, T., Tompkins, J. E., Gilbert, M., & Burridge,
	S. (2024)
10	Lynch, T., Tompkins, J. E., van Driel, I. I., & Fritz,
	N. (2016)
11	McCullough, K. M., Wong, Y. J., & Stevenson, N.
	J. (2020)
12	Perreault, M. F., Perreault, G. P., Jenkins, J., &
	Morrison, A. (2018)
13	Perry, K. (2022)
14	Ruberg, B., Cullen, A. L. L., & Brewster, K. (2019)
15	Sarda, E., Zerhouni, O., Gentile, D. A., Bry, C., &
	Bègue, L. (2022)
16	Schwind, V., & Henze, N. (2018)
17	Silva, J. P. N., Valadares, G. C., Pedrosa, G.,
	Rezende, D. C., Cappelle, M. C. A., & Assis, F. A.
	A. (2023)
18	Tompkins, J. E., Lynch, T., Van Driel, I. I., & Fritz,
	N. (2020)
19	Vandenbosch, L., Driesmans, K., Trekels, J., &
	Eggermont, S. (2017)

4 Results of the meta literature review

In this section, exploratory literature review findings will be presented and summarized in the context of two research questions.

4.1 Findings related to the RQ1

In relation to the first research question, a) representations and b) roles of female characters in selected academic papers were analyzed. Particular attention was paid to the hypersexualized representation of female protagonists in video games over the last ten years.

The most common stereotypes associated with female characters in video games are sexism, scantily clad women, and the notion of beauty (Ansari et al., 2019). One of the most studied elements of video game content is the sexual objectification of female characters, particularly in relation to their physical appearance. Women and female characters in video games are often portrayed through sexualized elements, such as unrealistic body shapes with emphasis on large breasts, small waists, and skimpy clothing that highlights their sexual characteristics (Lynch, Tompkins, Gilbert, & Burridge, 2024; Sarda et al., 2022). Female characters in video games are often portrayed as hypersexualized and objectified, and are primarily aimed at a male audience (Anupama & Chithra, 2022) or in a seductive way (Cross et al., 2024). Characters such as Sarah Kerrigan from StarCraft, a monstrously feminine character, are depicted in skimpy clothing that emphasizes sexual attributes and with unreal body proportions, regardless of their abilities and importance to the story's plot. Such depictions tend to draw the player's attention to the physical appearance rather than the character of the female protagonists (Blomquist, 2021). In video games, female characters' bodies are depicted as objects or as weapons, and the theme of female characters' (in)dependence is recognized (Blomquist, 2021)

Advertising materials for video games show women in highly sexualised poses. Women are portrayed as victims in video games, with little clothing or objectified to fulfil men's desires (Heron et al., 2014). For example, Joker's ally, Harley Quinn, is created as a marketing object to attract the younger male target audience (Anupama & Chithra, 2022).

In AAA video games (high-end and high-budget games such as *Grand Theft Auto, Call of Duty, and Red Dead Redemption*), female characters are rarely the main protagonists and are often portrayed as sexual objects or victims (Perry, 2022). Ruberg (2019)) emphasizes that these characters are not only objectified but are frequently depicted as sex workers or in passive roles, such as prostitutes or private

dancers, and are mistreated by male characters (Sarda et al., 2022)

The marginalisation of women in video games is closely linked to gender stereotypes that often portray them as helpless victims (e.g. damsels in distress who need to be rescued by a man) and secondary characters or often placing female characters in a lower status than male protagonists (McCullough et al., 2020). Sexualised female characters in video games promote stereotypes and women are portrayed as objects and are less important than men (Perreault, et al., 2018).

A study of 398 video games developed in the USA and Japan between 1983 and 2017 shows that only a third of female characters are main characters. Therefore, female characters are mostly minor characters and conform to traditional gender values (Lynch et al., 2024). The roles that female characters take in video games are usually passive and portrayed as a visual attraction for the male players (Anupama & Chithra, 2022) and have emphasised sexualised characters (Ansari et al., 2019). In World of Worcraft, female characters usually do not have a leading role, they are in the minority and are introduced as girls in trouble or as a reward for achieving a goal in the game (Silva et al., 2023). In the game Legaue of Legends, typical female characters usually do not have attack skills, but focus on defence or healing male characters such as "tanks" (Gao, Min, & Shih, 2017) supporting allies, which improves team performance (Davies, Headleand, & Hicks, 2020). On the other hand, female characters sometimes sacrifice their abilities as a character trait in order to develop or advance in the game (e.g. in the video game Heroes of the Strom). Female characters have more abilities to help other heroes in the game, which naturally puts them in a subordinate/inferior role (Davies et al., 2020).

It is worth mentioning that the (hyper)sexualized representation of female characters varies across different cultures. In Japanese culture, for example, in anime games, female characters are strong and have supernatural abilities, but are still represented sexually. On the other hand, some female characters are portrayed as innocent, pale, and sympathetic—traits that are desirable in this culture—which aligns with the empowerment of such characters (Tompkins et al., 2020). Nevertheless, games developed in the USA and Japan are quite similar in terms of the sexualized portrayal of female characters. In Japanese games, women tend to be portrayed in traditional female roles (e.g., princess, cheerleader) and do not dominate the game storyline (Lynch et al., 2024).

However, this literature review also found some positive examples and figures of female characters in video games. Female protagonists in video games such as *The Last of Us, Bioshock Infinite, Tomb Raider*, and *Beyond: Two Souls* feature female protagonists with developed skills and roles that are not merely passive but actively contribute to the game's plot (Perreault et al., 2018, p. 843). The results show that 80% of female

characters in games, regardless of the excessive sexualization of their physical representation, are capable within the plot (Lynch et al., 2024). Recently, however, there has been a positive trend toward a more realistic portrayal of female characters and those that can be chosen for the game. The primary female characters are less sexualized than the secondary female characters, and their meaning and character go beyond the sexualized portrayal. The secondary female characters are depicted in a sexualized way to increase their attractiveness in the game (Lynch et al., 2024). In League of Legends, the authors noted a positive trend toward equal competition between male and female characters in the game and an increase in the number of female champions (Davies et al., 2020).

4.2 Findings related to the RQ2

This section presents the main findings on the influence of sexualized, stereotypical female characters in video games on: (a) the perception of women within the gaming community and (b) the attitudes and self-perception of women when playing video games.

Sexualized depictions of female characters in video games negatively impact the perception and attitudes of gaming communities towards women (Blomquist, 2021), and contribute to the negative self-perception and self-objectification of women (Ansari et al., 2019). Players of hardcore games tend to be men, while women are more likely to play casual or single-player games. Male players often develop sexist attitudes towards women, perceiving them as sex objects (Ansari et al., 2019). This is supported by the results of a study involving the gaming experiences of 319 American women, which indicate that frequent video game play is associated with the formation of negative beliefs about women—such as the notions that they are less capable than men and lack leadership qualitiesleading to numerous prejudices against female gamers (McCullough et al., 2020).

In forum discussions, chats or online communities, female casual gamers rarely participate in discussions or express their opinions (Heron et al., 2014). In the virtual world of gaming, female gamers are often exposed to sexist jokes, insults and rape threats, which can force them into such actions that can later be linked to a lack of interest or abandonment of STEM careers due to exposure to negative gender values (Davies et al., 2020). While some women suffer the consequences of internalised misogyny (a form of sexist behavior and attitudes that women hold towards themselves or other women and girls), others resist harmful ideas about women portrayed in games (McCullough et al., 2020).

Researchers highlight the concept of 'gender camouflage', which posits that female players choose male characters to avoid possible negative comments, attitudes, and behaviors from male players, even when

female characters are an option (Silva et al., 2023). Interestingly, older female players are more likely to create male avatars and often reduce the femininity of their avatars, but invest more effort in customising their in-game appearance (Schwind & Henze, 2018). The negative self-perception of female gamers is associated with the use of sexualized avatars in video games and other virtual environments. Furthermore, these depictions contribute to a negative perception of women in general, which affects attitudes both in the virtual environment and in the real world (Fox et al., 2015).

Younger populations, including both girls and boys, develop increased self-objectification when playing with sexualized avatars compared to non-sexualized ones (Vandenbosch et al., 2017). Virtual portrayals of female characters in adult-only games trigger a sexually objectifying gaze in both male and female participants when exposed to them (Hollett, Morgan, Chen, & Gignac, 2020).

In the popular game League of Legends, gender stereotypes influence both player character selection and character design in line with players' real-life genders (Gao et al., 2017). In games like Grand Theft Auto (GTA), the roles of female characters as sex workers contribute to negative perceptions of women and devalue their work (Ruberg, 2019). The impact of identifying with video game characters varies; for example, it predicts a stronger association between self-concept and masculinity but does not correlate with the objectification of women (Schwind & Henze, 2018). Conversely, female players often seek a connection to video game characters that extends beyond physical appearance, encompassing both the character's personality and the game's storyline (Tompkins et al., 2020).

Distorted representations of the female body perpetuate stereotypes, and female gamers are less respected, even by members of the same gender (Blomquist, 2021). Sexualized representations of female characters in games or their portrayal in subordinate roles lead to so-called benevolent sexism (Davies et al., 2020) and are linked to the negative self-perception of women and self-objectification (Ansari et al., 2019). Additionally, the passive roles of female characters affect the common understanding that their role is secondary in games (Anupama & Chithra, 2022), and also in real-life situations.

In recent work, Lynch et al. (2024) point to positive trends in the balanced number of male and female gamers and a growing interest among women in playing games and participating in content creation. These trends have been further reinforced by feminist debates that have highlighted the problem of the stereotypical representation of female characters in video games, hypersexualized representation, and the underrepresentation of women in the gaming industry. Nevertheless, research findings suggest that short-term exposure of gamers to video games in which female characters are portrayed in a passive, hypersexualized

manner did not have a significant impact on the adoption of negative attitudes towards gender stereotypes or attitudes towards women (Cross et al., 2024). Similarly, recent analyses suggest that female characters in video games are portrayed in a less sexualized way (Lynch et al., 2024; Lynch, 2016), indicating a positive change in game development.

5 Conclusion

Although the review of the literature has shown that the problem of oversexualization and objectification still exists in relation to female characters in video games, recent work has shown positive developments where women are portrayed more realistically and play important roles in the story (e.g., Ellie in the game *The Last of Us*). Perreault et al., (2018) note that the development and inclusion of a greater number of female protagonists in video games, along with the creation of more complex female characters, can have a positive effect by reducing negative attitudes and stereotypes towards women.

Changes are taking place, and there is a positive trend towards more gender inclusivity and feminism, also driven by educating video game developers about gender stereotypes and the negative effects of hypersexualization (Tompkins et al., 2020). In the future, artificial intelligence and data mining could be used to build solutions to recognize elements of the objectification of women in video games (Ansari et al., 2019). One approach to gaining insights from the gaming community regarding female gaming and related issues is to use netnography to identify the current state (Silva et al., 2023).

In the future, more female developers should create video games to ensure a female perspective that could increase the interest of women in gaming and improve character portrayal (Anupama & Chithra, 2022). According to *Forbes* (2023), women take the role of representatives for gaming companies (so-called ambassadors) to attract more female players. Also, cosmetics and makeup brands are forming collaborations with popular female gamers in the industry.

The games industry also recognizes the need to integrate the principles of diversity, equality, and inclusion (DEI) into job roles, leading character creation, storylines, etc., to continue the positive progress for women and their real and virtual images in the industry and in society as a whole. These challenges are acknowledged in the media, professional and scientific literature, and by various organizations. Therefore, ongoing efforts are needed to sustain the progress made in breaking stereotypes.

The limitation of this paper is that a limited number of articles were found when searching the scientific databases because of using specific keywords. The topic of the hypersexualization of female characters, as well as female characters in general in video games, is a relevant topic in academic, professional, and media circles. Expanding the sources to include perspectives from female gamers, interviews with game developers, and insights from the gaming community would improve the understanding of perceptions of female characters in gaming world. Nonetheless, this paper makes an academic contribution by providing an overview of academic research from the last ten years and highlighting the positive progress made towards gender equality in video game characters.

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References

- Abbasi, A. Z., Rehman, U., Hussain, A., Ting, D. H., & Islam, J. U. (2021). The impact of advertising value of in-game pop-up ads in online gaming on gamers' inspiration: An empirical investigation. *Telematics and Informatics*, 62, 101630.
- Ansari, R., Jaffar, B. A., Riaz, S., Kaur, M. J., & Mushtaq, A. (2019). Datamining to alert the formation of women objectification stereotypes in video games. *Proceedings 2019 Amity International Conference on Artificial Intelligence, AICAI* 2019, 521–526. https://doi.org/10.1109/AICAI.2019.8701256
- Anupama, K., & Chithra, G. K. (2022). Of castration anxiety and hypersexualized female bodies: A critical assessment of the objectifying gaze in *Batman: Arkham Video Game Series. Theory and Practice in Language Studies, 12*(9), 1921–1929. https://doi.org/10.17507/tpls.1209.26
- Blomquist, G. (2021). Postmodern Medusa: The monstrous-feminine in *StarCraft II: Heart of the Swarm. Games and Culture, 16*(7), 885–906. https://doi.org/10.1177/15554120211005232
- Brusuelas, C. (2021, February 18). *Horizon Zero Dawn*: PS4 feminist reviews. *Medium*. https://cbrucewillis.medium.com/horizon-zero-dawn-ps4-feminist-reviews-bf786898d380
- Cote, A. C. (2020). Gaming sexism: Gender and identity in the era of casual video games. New York University Press.
- Cross, L., Kaye, L. K., Savostijanovs, J., McLatchie, N., Johnston, M., Whiteman, L., ... Atherton, G. (2024). Gendered violence and sexualized representations in video games: (Lack of) effect on gender-related attitudes. *New Media and Society*, 26(3), 1648–1669.

- Deloitte. (2024). For women playing video games, it's (still) a man's world. Retrieved 29 June 2024, from https://www2.deloitte.com/xe/en/insights/industry/technology/digital-media-trends-consumption-habits-survey/2024/how-can-gaming-industry-get-more-female-gamers.html
- Desoniq Studio. (2023). Game on: How gaming revolutionized pop culture From movies to music and runways. Retrieved 24 June 2024, from https://www.linkedin.com/pulse/game-how-gaming-revolutionized-pop-culture-from-movies/
- Dill, K. E., & Thill, K. P. (2007). Video game characters and the socialization of gender roles: Young people's perceptions mirror sexist media depictions. *Sex Roles*, 57(11–12), 851–864. https://doi.org/10.1007/s11199-007-9278-1
- Drummond, B. M., Salgado, L. C. de C., & Viterbo, J. (2022). What are the challenges faced by women in the games industry? *Proceedings 2022 Workshop on Interactive Technologies and Games*, 167–178. https://doi.org/10.5753/wit.2022.223130
- Duckworth, J. (2018, December 16). Assassin's Creed Odyssey director reveals how many players picked Alexios. Game Rant. Retrieved September 3, 2024, from https://gamerant.com/assassins-creed-odyssey-alexios/
- Engelbrecht, J. (2020). The new Lara phenomenon: A postfeminist analysis of *Rise of the Tomb Raider*. *Game Studies*, 20(3), 9.
- Entertainment Software Association. (2024). Essential facts about the U.S. video game industry: 2024 data. Retrieved September 2, 2024, from https://www.theesa.com/resources/essential-facts-about-the-us-video-game-industry/2024-data/
- Forbes. (2023). Leveling up the gaming gender gap. Retrieved 27 June 2024, from https://www.forbes.com/sites/forbesbusinesscounc il/2023/08/24/leveling-up-the-gaming-gender-gap/
- Fox, J., Ralston, R. A., Cooper, C. K., & Jones, K. A. (2015). Sexualized avatars lead to women's self-objectification and acceptance of rape myths. *Psychology of Women Quarterly*, *39*(3), 349–362. https://doi.org/10.1177/0361684314553578
- Gao, G., Min, A., & Shih, P. C. (2017). Gendered design bias: Gender differences of in-game character choice and playing style in *League of Legends*. *ACM International Conference Proceeding Series*, 307–317.

- https://doi.org/10.1145/3152771.3152804
- Heron, M., Belford, P., & Goker, A. (2014). Sexism in the circuitry: Female participation in maledominated popular computer culture. *ACM SIGCAS Computers and Society*, 44(4), 18–29.
- Hewett, K. J. E., Zeng, G., & Pletcher, B. C. (2020). The acquisition of 21st-century skills through video games: *Minecraft* design process models and their web of class roles. *Simulation and Gaming*, *51*(3), 336–364. https://doi.org/10.1177/1046878120904976
- Hollett, R. C., Morgan, H., Chen, N. T. M., & Gignac, G. E. (2020). Female characters from adult-only video games elicit a sexually objectifying gaze in both men and women. *Sex Roles*, 83(1–2), 29–42. https://doi.org/10.1007/s11199-019-01096-y
- Howarth, J. (2024). How many gamers are there? (New 2024 statistics). Retrieved 29 June 2024, from https://explodingtopics.com/blog/number-of-gamers
- Jansz, J., & Martis, R. G. (2007). The Lara phenomenon: Powerful female characters in video games. *Sex Roles*, 56(3–4), 141–148. https://doi.org/10.1007/s11199-006-9158-0
- Kirkpatrick, G. (2017). How gaming became sexist: A study of UK gaming magazines 1981–1995. *Media, Culture and Society, 39*(4), 453–468. https://doi.org/10.1177/0163443716646177
- Kitchenham, B., & Charters, S. (2007). Guidelines for performing systematic literature reviews in SE. *Guidelines for Performing Systematic Literature Reviews in SE*, 1–44.
- Lance, S. (2018, December 3). Ubisoft should have trusted *Assassin's Creed: Odyssey* with a female protagonist. *Merry-Go-Round Magazine*. Retrieved September 3, 2024, from https://merrygoroundmagazine.com/assassinscreed-odyssey-trusting-the-female-protagonist/
- Lavrador, E. (2023). Video games against the male gaze. *Journal of Science and Technology of the Arts,* 15(2), 135–153. https://doi.org/10.34632/jsta.2023.15706
- Lewis, E. (2024). *Resident Evil*: Every iteration of Jill Valentine, ranked. *Gamerant*. Retrieved 25 June 2024, from https://gamerant.com/resident-evilbest-jill-valentine-versions/
- Lynch, T., Tompkins, J. E., Gilbert, M., & Burridge, S. (2024). Evidence of ambivalent sexism in female video game character designs. *Mass Communication and Society*, 00(00), 1–26. https://doi.org/10.1080/15205436.2024.2311229
- Lynch, T., Tompkins, J. E., van Driel, I. I., & Fritz, N. (2016). Sexy, strong, and secondary: A content analysis of female characters in video games across

- 31 years. *Journal of Communication*, 66(4), 564–584. https://doi.org/10.1111/jcom.12237
- Martins, N., Williams, D. C., Harrison, K., & Ratan, R. A. (2009). A content analysis of female body imagery in video games. Sex Roles, 61, 824–836.
- Mascellino, A. (2024). 70+ video game statistics you need to know in 2024: Market growth, emerging trends, and more. Retrieved 24 June 2024, from Technopedia website: https://www.techopedia.com/video-game-statistics
- McCullough, K. M., Wong, Y. J., & Stevenson, N. J. (2020). Female video game players and the protective effect of feminist identity against internalized misogyny. *Sex Roles*, 82(5–6), 266–276. https://doi.org/10.1007/s11199-019-01055-7
- Miller, M. K., & Summers, A. (2007). Gender differences in video game characters' roles, appearances, and attire as portrayed in video game magazines. *Sex Roles*, 57(9–10), 733–742. https://doi.org/10.1007/s11199-007-9307-0
- Niko Partners. (2023). Female gamers in Asia. Retrieved September 2, 2024, from https://nikopartners.com/female-gamers-in-asia/
- Paraschos, P. D., & Koulouriotis, D. E. (2023). Game difficulty adaptation and experience personalization: A literature review. *International Journal of Human-Computer Interaction*, 39(1), 1–22.
 - https://doi.org/10.1080/10447318.2021.2020008
- Perreault, M. F., Perreault, G. P., Jenkins, J., & Morrison, A. (2018). Depictions of female protagonists in digital games: A narrative analysis of 2013 DICE award-winning digital games. *Games and Culture, 13*(8), 843–860. https://doi.org/10.1177/1555412016679584
- Perry, K. (2022). Damsels and darlings: Decoding gender equality in video game communities. *Feminist Media Studies*, 22(5), 1102–1119. https://doi.org/10.1080/14680777.2021.1883085
- Pugh, T. (2018). The queer narrativity of the hero's journey in Nintendo's *The Legend of Zelda* video games. *Journal of Narrative Theory*, 48(2), 225–251.
- Ruberg, B. (2019). Representing sex workers in video games: Feminisms, fantasies of exceptionalism, and the value of erotic labor. *Feminist Media Studies*, 19(3), 313–330. https://doi.org/10.1080/14680777.2018.1477815
- Ruberg, B., Cullen, A. L. L., & Brewster, K. (2019). Nothing but a "titty streamer": Legitimacy, labor, and the debate over women's breasts in video game live streaming. *Critical Studies in Media Communication*, 36(5), 466–481. https://doi.org/10.1080/15295036.2019.1658886

- Sarda, E., Zerhouni, O., Gentile, D. A., Bry, C., & Bègue, L. (2022). Some effects of sexist video games on self-masculinity associations. *Information Communication and Society, 25*(12), 1683–1698. https://doi.org/10.1080/1369118X.2021.1877770
- Schwind, V., & Henze, N. (2018). Gender- and agerelated differences in designing the characteristics of stereotypical virtual faces. *CHI PLAY 2018 Proceedings of the 2018 Annual Symposium on Computer-Human Interaction in Play*, 462–475. https://doi.org/10.1145/3242671.3242692
- Shliakhovchuk, E., & García, A. M. (2020). Intercultural perspective on impact of video games on players: Insights from a systematic review of recent literature. *Educational Sciences: Theory and Practice*, 20(1), 40–58. https://doi.org/10.12738/jestp.2020.1.004
- Silva, J. P. N., Valadares, G. C., Pedrosa, G., Rezende, D. C., Cappelle, M. C. A., & Assis, F. A. A. (2023). Gender imbalance in MMORPG: The case of World of Warcraft in Brazil. *Feminist Media Studies*, 23(1), 289–305. https://doi.org/10.1080/14680777.2021.1973060
- Statista. (2024a). Distribution of video game developers worldwide from 2014 to 2021, by gender. Retrieved 23 June 2024, from https://www.statista.com/statistics/453634/game-developer-gender-distribution-worldwide/
- Statista. (2024b). Number of video game users worldwide from 2019 to 2029. Retrieved 24 June 2024, from https://www.statista.com/statistics/748044/number -video-gamers-world/
- Statista. (2024c). Digital games users by age and gender in the UK. Statista Digital Market Outlook. Retrieved September 2, 2024, from https://www.statista.com/forecasts/461273/digital-games-users-age-gender-digital-market-outlook-uk
- Statista. (2024d). *Video games Worldwide*. Retrieved 24 June 2024, from https://www.statista.com/outlook/dmo/digital-media/video-games/worldwide?currency=USD
- The odyssey of woman representation. (2021, April 16). *Just a Game*. Retrieved September 3, 2024, from https://justagame.uk/2021/04/16/the-odyssey-of-woman-representation/
- Toh, W., & Kirschner, D. (2020). Self-directed learning in video games, affordances and pedagogical implications for teaching and learning. *Computers & Education*, 154, 103912.
- Tompkins, J. E., Lynch, T., Van Driel, I. I., & Fritz, N. (2020). Kawaii killers and femme fatales: A textual analysis of female characters signifying benevolent

- and hostile sexism in video games. *Journal of Broadcasting and Electronic Media*, 64(2), 236–254.
- https://doi.org/10.1080/08838151.2020.1718960
- Vandenbosch, L., Driesmans, K., Trekels, J., & Eggermont, S. (2017). Sexualized video game avatars and self-objectification in adolescents: The role of gender congruency and activation frequency. *Media Psychology*, 20(2), 221–239. https://doi.org/10.1080/15213269.2016.1142380
- Woolbright, L. (2018). Ecofeminism and gaia theory in *Horizon Zero Dawn. Trace Journal*, 2.
- YouGov PLC. (2023). Gaming & Esports Report 2023.