TANG, N.L., MOON, E.E., GARRIDO INIGUEZ, J.D.J., RAMIREZ, D.R.M. and GARDNER, D.L. 2025. From pixels to perspectives: exploring perceptions of representation in character design. *Information research* [online], 30(iCONF 2025): proceedings of the 20th International conference 2025 (iCONF 2025): living in an AI-gorithmic world, 18-22 March 2025, Bloomington, ID, USA, pages 1180-1201. Available from: https://doi.org/10.47989/ir30iConf46939

From pixels to perspectives: exploring perceptions of representation in character design.

TANG, N.L., MOON, E.E., GARRIDO INIGUEZ, J.D.J., RAMIREZ, D.R.M. and GARDNER, D.L.

2025

© 2025 Nani Le Tang, Erin Eungyo Moon, Jose De Jesus Garrido Iniguez, Daniel Raul Mena Ramirez, Daniel L. Gardner.

OpenAIR @RGU

This document was downloaded from https://openair.rgu.ac.uk

BY NC ND

Information Research - Vol. 30 No. iConf (2025)

From pixels to perspectives: exploring perceptions of representation in character design

Nani Le Tang, Erin Eungyo Moon, Jose De Jesus Garrido Iniguez, Daniel Raul Mena Ramirez, and Daniel L Gardner

DOI: https://doi.org/10.47989/ir30iConf46939

Abstract

Introduction. This study presents findings about perceptions of how women characters are introduced in a sample of six best-selling games. Our analysis adds to ongoing conversations about representation in games and media, encouraging both designers and researchers to reflect on how perceptions and emotions related to representation shape interactions from the perspectives of gamers and non-gamers alike.

Method. We analysed 198 responses to a survey that asked participants questions about how they felt about short videos of character introductions and captured open-ended responses about the roles these characters occupied.

Analysis. We used descriptive and comparative statistics to identify basic trends in closed-ended survey responses amongst participants. We then identified, applied, and iterated on emergent descriptive qualitative codes designed around participant's open-ended responses.

Results. We identified a series of themes regarding cultural context, perceived characterization and character roles, and time and dialogue.

Conclusions. Our findings build on previous literature about character design and women's representation in games with analysis based on community perceptions and provide considerations for anyone designing characters and their introductions or working with diverse groups to make the medium and industry more inclusive.

Introduction

Between 65% and 70% of United States adults engage with at least one gaming platform (ESA, 2023; IGDA, 2022). The characters players take on or interact with in games are a key part of how people relate to and connect to the gaming medium. (Birk et al., 2016; Boellstorff, 2008; Freeman & Maloney, 2021; Huh & Williams, 2010; Klastrup & Tosca, 2009). Previous research examines sexism in the representation of these characters, in the character design process, and in communities that surround gaming, as well as the negative impact these phenomena can have on players (Beasley & Stanley, 2002; Behm-Morawitz & Mastro, 2009; Cullen & Ruberg, 2019; Downs & Smith, 2009; Leonard, 2003; Ruberg et al. 2019). In this paper, we begin to highlight the importance of studying how women characters are introduced in games.

While commonly associated with visual elements, '*character design*' is a multifaceted process describing the development of characters well-beyond their appearances, encompassing personalities, actions, and narratives. Though games are becoming more inclusive, many women characters are still designed with reductive gender roles. Scholars describe how women characters often present cliched tropes such as the '*damsel-in-distress*'—fragile, dependent, and awaiting rescue from their male counterparts—rather than as active heroic characters (Salter & Blodgett, 2017). Despite some recent changes in the Super Mario franchise, a popular long-running example is Princess Peach and her recurring pleas: '*help me, Mario!*', '*thank you, Mario!*', or '*Mario, you're my knight in shining armour!*' (Super Mario Wiki, n.d.). Recent games with women protagonists are not immune from relying on these tropes. For example, in a popular ongoing series, Final Fantasy XIII-2's main woman character is accompanied by two leading men upon whom she is highly reliant for protection and victory against enemies that she could not otherwise fight alone (Tompkins et al., 2020).

The reproduction of stereotypes and reductive gender roles can perpetuate harmful norms and perceptions of women and other groups. Shaw describes how representation and narratives influence what players even recognize as possible ways of '*being*' in the world (2017). Others identify how the hyper-sexualisation of female characters and reproduction of stereotypical gender roles can reflect the preferences of a gaming industry predominantly shaped and led by men (Breuer et al., 2015; Ochsner, 2017; Phan et al., 2012; Tompkins et al., 2020). Despite 46% of US adults that play games being women (ESA, 2023), less than 24% of industry workers are women (Zippia, 2022). These points describe a scenario where inherently sexist and stereotypical depictions and attitudes work recursively to shape the medium, industry, and communities while normalizing harmful consequences for women, and other marginalized communities.

Narratives structure the worlds characters live in and tell us more about who characters are beyond their appearance. Narratives enrich the gaming experience by conveying emotional, interpretive, and role-playing opportunities (Curtis, 2015; Lankoski, 2002). Qin et al. reiterate that '*without narrative, the existence of the game world and characters is meaningless*' (2009), as visuals without context cannot provide sufficient depth. Narratives can differentiate character or player experiences or encourage players to consider how in-game actions may affect how their characters grow, develop, or are perceived by others. Additional research is required to understand the impact of character narratives on players or potential players.

This paper analyses how 198 diverse survey respondents interpret the narrative introduction of women characters in a sample of best-selling games—both as protagonists and secondary characters. Aside from matters of project scale, we chose to focus on introductions to better understand the perceptions participants' have in their first impression/interaction with characters because first impressions can dramatically influence how someone is perceived. We aim to begin exploring the understudied relationship between women character narrative designs and how players perceive them. Our approach is guided by scholars who highlight the impact of reductive and harmful character designs on consumer perceptions and social norms (Cote, 2020;

Dill & Thill, 2007; Gestos et al., 2018; Lynch et al., 2016; Mou & Peng, 2009; Nakamura, 2019; Shaw, 2014; Tompkins & Martins, 2021), and those that try to incorporate diverse (and sometimes non-scholarly) perspectives in the analysis of games (Gardner & Corvite, 2023; Liu 2018; Reza et al., 2022). This study looks at the perceptions of diverse folks—along commonly considered demographic axes and how frequently they report playing games. Our findings provide several considerations for anyone designing characters and their introductions or working with diverse groups to make the medium and industry more inclusive.

Related work

Based on an initial review of 108 articles across disciplines related to women's representation, character design, and sexism in gaming. These articles are organized into three themes: sexism in character design, sexist norms in gaming communities, and women's representation and social perspectives.

We identify a gap in the literature; while there are many *scholarly* content analyses and interpretations of characters narratives, there is a dearth of research centring how diverse *players or potential players* perceive and interpret these woman character narratives.

Sexism in character design

Many scholars discuss the sexist ways women are depicted in and around video games (Beasley & Standley, 2002; Behm-Morawitz & Mastro, 2009; Carvalho & Cappelli, 2018; Cote, 2018; McArthur, 2018; Mou & Peng, 2009). This includes quantitative and qualitative explorations of biased, stereotypical, reductive, and potentially harmful visual and narrative depictions of women in games.

Many scholars examine sexist depictions by focusing on the frequency of women characters and the qualities of their visual appearance within videogames and associated paratexts (Burgess et al., 2007; Dill & Thill, 2007; Gardner & Tanenbaum, 2018; Gestos et al., 2018; Miller & Summers, 2014; Shaw & Friesem, 2016). Although scholars observe an increase in the amount of women characters present in videogames (Lynch et al., 2016), men are still much more frequently main characters compared to women when present (Gardner & Tanenbaum, 2018; Maclean, 2016). Other scholars observe how women are still frequently depicted with unrealistic bodies and exaggerated sexualization (Downs & Smith, 2010; Glaubke et al., 2001; Jansz & Martis, 2007; Tompkins & Martins, 2021), complicating the quality of increased representation.

Scholars also examine narratives, roles, and dialogues of women in video games (Butt & Dunne, 2017; Hart, 2017; Gray et al., 2017; Kennedy, 2002; MacCallum-Stewart, 2014; Masso, 2011; Perreault et al., 2018; Santonicollo et al., 2023; Sherman, 1997; Ugolotti et al., 2020). Many of these studies suggest women characters often give insignificant or demeaning roles in relation to main (men) characters (Friedberg, 2015; Masso, 2011). For example, Heritage describes how men in the popular Witcher series more often have active roles with more power (e.g., kings or military leaders) while women more often serve as advisors and onlookers (2022).

Despite these negative trends, several scholars also examine more contemporary characters who challenge stereotypical depictions (Allen, 2023; Lankoski, 2004; Lucas, 2019; Solska, 2022). For example, Solska identifies a sample of three games that present women characters in narratively focal roles in which they interact with other characters and environments instead of only being submissive and passive (2019). These studies encourage us to consider what and how other aspects of characters may be sexist, and how to begin to confront the issue beyond characters' surface appearance.

Sexist norms in gaming communities

A wide variety of scholars identify how norms can dramatically shape how people experience social, professional, and recreational communities such as those that surround games (Auerbach, 2014; Campbell, 2014; Cote, 2017; Edidin, 2014; ESA, 2023; Fox & Tang, 2014; Gonzalez et al, 2014; Gray et al., 2017; Hart, 2017; Koh & Das, 2017; Lenhart et al., 2008; Leonhardt, 2021; Mou & Peng, 2009; Ochsner, 2017; Reza et al, 2022; Shliakhovchuk & Muñoz García, 2020; Tompkins et al., 2020; Weber, 2012; Williams, 2003), and can contribute to the stereotypes discussed in the previous section. We organize our research with this theme that describes norms, attitudes, and structural forces that deter women from accessing the digital game medium, its production, and associated communities to the fullest.

Several studies suggest the predominantly male game industry perpetuates a sexist workplace culture as well as negative or harmful portrayals of women (Gray et al. 2017; Mou & Peng, 2008; Tompkins & Martins, 2021. Gaming has too often been considered '*an activity created by men and for men*' (Carvalho & Cappelli, 2018), with many women professionals testifying to workplace discrimination and/or harassment (Weber, 2012). Sexism in the gaming industry makes it harder for women to succeed professionally and facilitates '*the sexualization of female game characters*' (Tompkins et al., 2020). These studies help support the persistent claim that increasing equity and inclusion, and hiring more women, are necessary in the design process to address the sexistnormative industry environments that perpetuate sexist representations (Campbell, 2018; Doerrer & Campain Live, n.d.; Elderkin, 2023; Kennedy, 2018; 2002; Passmore et al., 2017; Qin et al., 2009; Reza et al., 2022; Solska, 2022; Wood & Wood, 2008).

Perceived market factors can drive sexist representations of women in games and reproduce past narratives as a risk management strategy (Stermer & Burkley, 2015; Ugolotti et al., 2020). Tompkins and Martins describe demands for a '*success formula*' (e.g., Figure 1) to guarantee return of investments based on repeating past (men-dominant) successes (2021). However, this approach heavily depends on assumptions about the '*real world*' that do not always align with the actual population of players (Duggan, 2015a; 2015b; Lenhart et al., 2008; Lenhart et al., 2015; Passmore et al., 2017; Shaw, 2009; 2014).

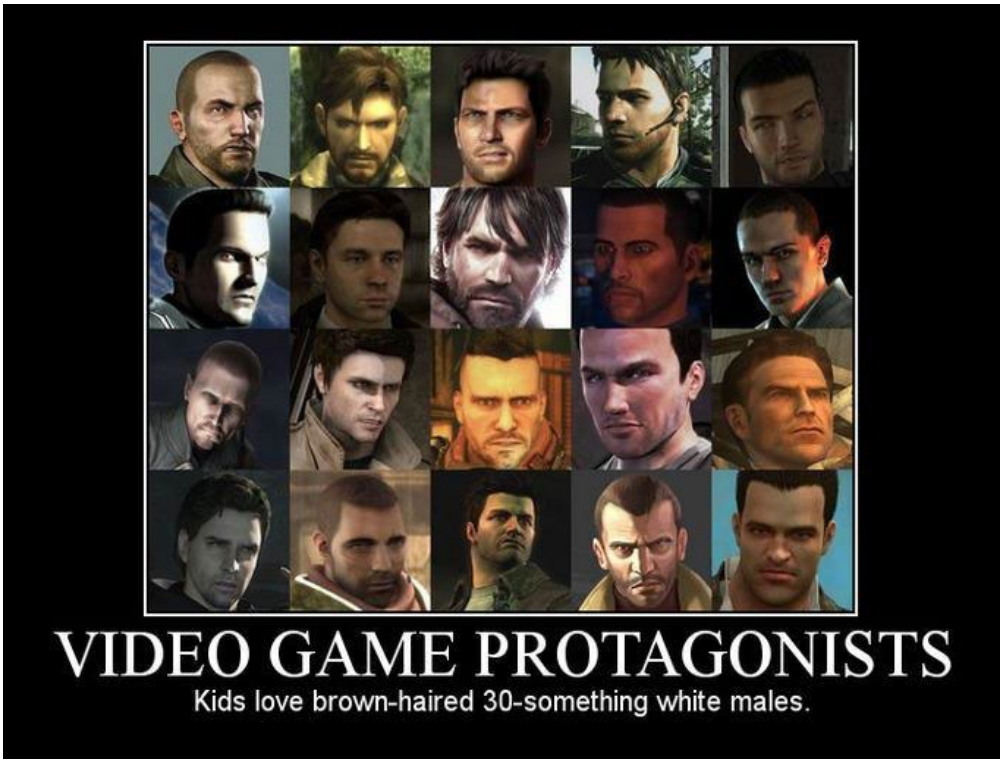

Figure 1. Example of a common meme characterizing dominance of white men main characters (n.d.)

Player-based gaming communities are also historically discriminatory towards women. There is a common refrain that '*girls cannot play, are mechanically unskilled, and owe their achievements to a male counterpart who has helped them get there*' (Koh & Das, 2017). Scholars identify how women players are regularly subject to harassment and sexist environments (Aghazadeh et al., 2018; Bezio, 2018, Campbell, 2014: Condis, 2015; Edidin, 2014; Massanari, 2017; Mortensen, 2018; O'Leary, 2012; Wingfield, 2014). with some suggesting lax consequences and scrutiny of such norms contributing to their proliferation (Fletcher, 2012). Fox and Tang identify how endorsing broader masculine norms is a predictor of sexist attitudes about women playing video games (2014). While Cote reveals that women players are often capable of managing online game-related harassments, it is an inequitable burden that they need to adopt coping strategies at all simply to participate in the medium (2017).

Women's representation and social perspectives

Despite the wealth of studies identifying poor representation in games described in section 2.1 and beyond, there are surprisingly few studies examining how players and people surrounding the medium themselves perceive and interpret representation. Beyond the general influence on formal and informal norms discussed in section 2.2, negative visual and narrative portrayals can be linked to harmful outlooks on life (Stermer & Burkley, 2015). We organize studies that analyse the influence of the representation on people and community perceptions (emphasizing harmful effects) or that analyse how people or communities themselves perceive or interpret that representation.

Studies show how representation in video games can influence player attitudes and perceptions about gender (Bowey, 2017; Liu, 2018; Mou & Peng, 2009; Shaw, 2014; Stermer & Burkley, 2015; Yao et al., 2010). Frequent engagement with sexist games links to sexist attitudes in players and negatively impacts women's well-being beyond games (Fox & Bailenson, 2009; Gabbiadini et al., 2016; Scharrer, 2004; Summers & Miller, 2014). In a meta-analysis, Gestos et al. demonstrates how

increases in objectification in games can diminish women players' self-efficacy and well-being while promoting sexist views in male players (2018).

Though fewer in number, some studies examine how players or potential players themselves perceive, interpret, and respond to representation in games (Desai et al., 2017; Stermer & Burkley, 2015; Gardner & Hacker, 2022; Tomkinson et al., 2020). Kondrat found that 76.9% of participants in their study recognize negative stereotypes in women characters in games, generally, and 31.62% identify sexual objectification specifically, with a majority of participants desiring less stereotypical characters (2015). Other scholars identify how the interpretations of character representation, and their influence can vary between different player demographic identities (Gardner & Corvite, 2023; Liu, 2018; Nguyen et al., 2020; Reza et al., 2022). Our study further explores community perceptions focusing on women character narratives rather than focusing just on researcher-centred content analysis of physical appearances.

Methods

We developed a survey following Chapman University IRB approval, containing a combination of closed and open-ended questions. Using a sample of games, we focused on understanding how racially and gender diverse participants perceived and interpreted the narrative introduction of women characters, how those characters might resemble real life women, as well as participants' broader feelings about the characters. We analysed our survey results quantitatively and qualitatively using descriptive and comparative statistics, and emergent descriptive codes, to identify basic trends in overall responses and between participant groups.

Our approach was organized around a primary overarching research question:

RQ1. How do diverse community members' interpretations of how women videogame characters' introductions reflect/express broader social norms around gender?

Addressing every personal and cultural dimension of this question is beyond the scope of this study. However, our study begins to address this question by examining how diverse participants in terms of race, gender, and frequency of play—likely from North America—perceive and interpret six women's introductions of best-selling narrative games.

Survey design

Our primary analysis is of participant impressions rather than the videos themselves. That is, rather than us defining or assigning sufficiency to—for instance—introduction duration and asking participants how strongly they agreed with us, our key data are participants' own interpretations of sufficient understanding, within the scope of provided clips. We chose a survey during our preliminary stages to reach larger and more diverse audiences and to better understand the state of the medium. Our survey was organized into three sections on a Google Form. The first section asked participants about demographic characteristics including age, primary language, gender, race, gaming habits and aspects they felt make characters more relatable. The second section showed participants one-minute video game clips introducing six sampled characters outlined below in section 3.2. Following each clip, we asked participants to respond to four statements about their impressions of each character/introduction based on time, dialogue, how strongly they felt the characters resemble any women they know in their life, and their perception of the character's importance to the game's narrative. These questions utilized Likert scales to evaluate how strongly participants agreed or disagreed with statements about our sample of characters and their introductions. The third section asked questions about participant thoughts on the roles of the sampled characters and any other remaining general thoughts or feelings.

Game/clip selection

In November 2023, we selected the three best-selling '*story rich*', single-player games with women protagonists and the three best-selling games with men protagonists, where women characters were introduced (with dialogue) within the first two hours of gameplay. We sampled from Steam because it is the largest digital games retailer, accounting for 61% of all full game revenue from new releases in 2023 (Fragen, 2024). We did this by going to their digital store and selecting '*top sellers*', filtering by the tags above, and identifying the best-selling games by units sold on Steam. We chose to look at recent mainstream games from 2023 to capture perceptions about a relatively current snapshot of the state of the medium. We narrowed down our game selection to games meta-tagged with story-rich and single-player as these generally suggest heavier character narratives and/or story-driven goals. We excluded games that had deuteragonists or customizable main characters, non-human characters, and games without clear dialogue for women characters in the first two hours of the game. We made these exclusions to maintain a clear focus on the representation and narrative introduction of women characters.

We chose to focus on one-minute clips to be respectful of participants' time by providing shorter length videos, only capturing first scenes that introduce the characters. For games with women protagonists, we found clips of their introductions/first dialogues using commentary-free gameplay walkthroughs, or '*let's play*', on YouTube. Similarly, we also identified clips for the first appearances/introductions of supporting women characters with dialogue within the first two hours by first watching walkthroughs to confirm on YouTube.

We wanted to observe potential differences in perceptions between games led by women protagonists and games with women but led by men protagonists. We chose sub-samples of three of each game-type and six games total to reach a minimum number of examples to make comparisons while also trying to be considerate of participants' time and the length of the survey.

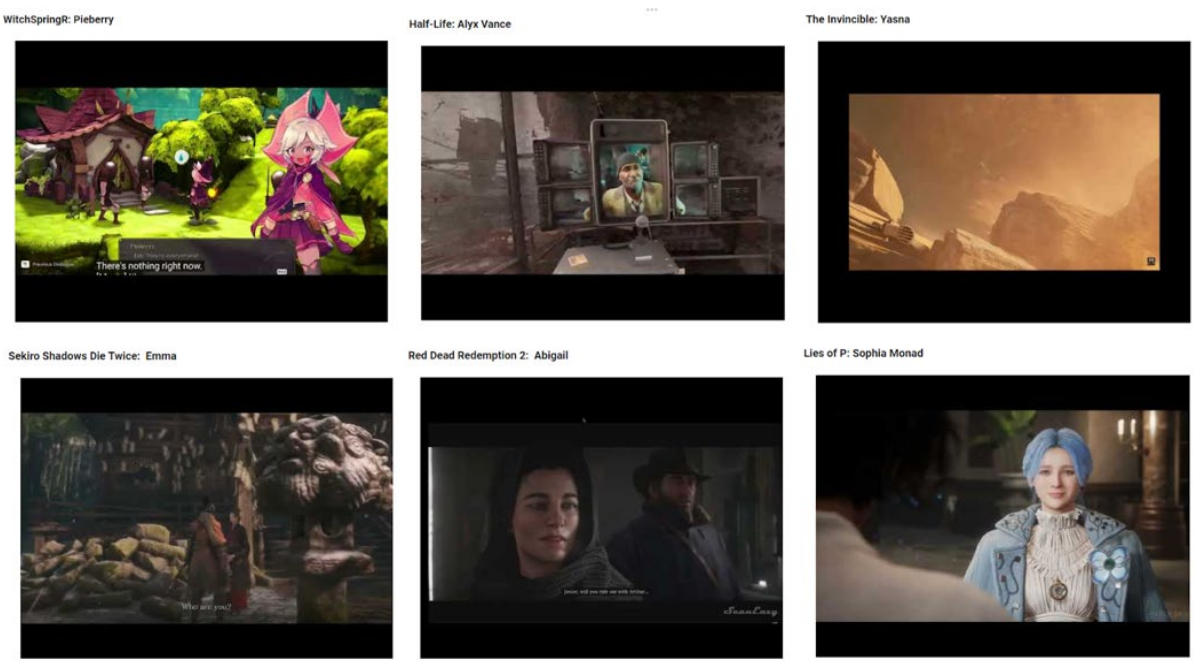

Figure 2. Illustrates the six gaming clips, women-led (top) and men-led (bottom), included in the survey

Recruitment

To be eligible, the only requirement was for participants to be at least 18 years old and speak English—because the survey was in English—regardless of their gaming experience. However, we were especially interested in the perspectives of women and anyone who feels historically underrepresented in media.

Our team digitally and physically distributed the survey in three waves. The first two waves involved social media platforms such as Discord, email lists, Facebook, Instagram, LinkedIn, and Slack. Our team members each represent unique interdisciplinary and demographic backgrounds and—at time of data collection—they were based at four different institutions in California, Indiana, and Texas. We began with personal networks and moved on to forums and community groups related to gaming—either public groups online or associated with student groups on our respective campuses. To further increase participant diversity, we made additional efforts to include communities centred on women and gaming such as the '*women in gaming*' discord or inclusive gaming network and the game HERs. The third wave involved posting flyers and recruiting faculty at our respective institutions to physically solicit additional possible participants. Because our sampling relied heavily on university groups centred in North America, participation was biased toward college-based/aged communities, likely residing in North America.

Data analysis

We began by using descriptive and comparative statistics to identify basic trends in closed-ended responses by all participants and between participant groups (e.g., race, gender, or frequency of play). We then identified, applied, and iterated on emergent descriptive qualitative codes for open-ended responses.

We ran three waves of Welch's t-tests focused on responses to the second section of the survey. Responses to the Likert scales were converted to integers 1 to 5 to calculate averages and make comparisons, with 1 representing strongly disagree, 5 representing strongly agree, and 3 representing a neutral response.

The first wave consisted of high-level t-tests within and between groups based on identified race and gender. Specifically, we compared responses between participants who identified as White and those who did not, and between those who identified as men and those who did not. We chose to start with these separations to see if we could observe any differences in perception between those who are historically well-represented in games and media and those who are not. That is, white men are often more represented than other folks in games (Gardner & Tanenbaum, 2018; Passmore et al., 2017; Williams et al., 2009), and in the game industry (AGA, 2023). We calculated each participant's mean response to all six copies of the repeating questions in the second section of the survey and tested them between groups to identify any significant differences. We compared responses by these groups across all six games, across men-led games, across women-led games, and for each individual game. One participant who preferred not to state their gender was only included in analysis based on identified race and of total participants.

The second wave involved the same comparisons across games and sub-samples of games, but tested responses based on intersectional demographic identifiers combining two variables such as race, gender, and frequency of stated gaming activity (e.g., every day, a few times a week, a few times a month, rarely, never). We did, however, still primarily with a focus of comparing the '*default*' against everyone else. For example, we compared responses between white-men and not white men, white-women, and not white women, and those who identified as white and as playing a particular frequency and those who did not identify as white who played that frequency.

We conducted the third wave after qualitative review of open-ended responses, specifically participant comments relating to the cultural context of characters (discussed more below). In this

final round of tests, we compared responses to the introductions in Half-Life: Alyx, Red Dead Redemption 2, and The Invincible, realizing based on responses that they were Western (North America and Europe) developed games, and Asian-developed games: Lies of P, Sekiro, and Witch Spring R.

We created and applied emergent, descriptive codes to responses to the open-ended questions in the final section (Saldaña, 2015). Each author independently read and coded open-ended responses to independently identify themes. The authors then came together to discuss, aggregate, and iterate on thematic codes, and consider how these themes and participant quotes related to quantitative data.

Findings

We organized our findings around comparisons between responses of singular or intersectional demographics of identified gender and race and a series of related qualitative themes we found in our open-ended responses. Our three key findings describe participants' perceptions regarding cultural context, characters' roles, and the presentation of character introductions based on time and dialogue.

Survey responses came from a more diverse than representative sample. The most represented gender category participants most-identified as was Woman (49.2%), followed by Man (41.6%), and Nonbinary (7.1%). Table 1 shows a detailed breakdown of participant gender demographics for our study. The most represented racial category participants identified as was White (32.8%), followed by Latine/o/a (19.7%) and Mixed/Multi-racial (14.7%) (Table 2). Although we asked about age, primary language, and frequency of play, we did not identify any key findings associated with these variables.

Gender	n (%)
n	198 (100%)
Women	97 (48.99%)
Men	83 (41.92%)
Nonbinary	17 (8.59%)
Prefer not to identify	1 (0.51%)

Table 1. Gender demographics of survey participants displayed from greatest to least number of participants (response to Q2 in survey)

Racial/Ethnic Demographic	n (%)
n	198 (100%)
White	65 (32.8%)
Latine/o/a	39 (19.7%)
Mixed	29 (14.7%)
East Asian	21 (10.6%)
South-East Asian	21 (10.6%)
Black/African American	15 (7.6%)
South Asian	7 (3.5%)

Table 2. Racial demographics of survey participants displayed in order of prevalence

Cultural Context

Our quantitative results showed that all participants, on average, were more likely to know at least one woman similar to the characters that appeared in games developed in a Western context compared to those developed in an Asian context. Relatedly, we observed multiple participants not only acknowledging the role of a developer's culture in open-ended responses, but also identifying tropes and stereotypes that may rely on cultural reference such as one participant's use of '*kawaii*', a Japanese trope for '*lovable*' or '*cute*'.

When asked how strongly they agreed or disagreed with whether characters were similar to at least one woman they knew in real life, participants, on average, were more likely to agree for characters developed in a Western context compared to those developed in an Asian context ($p=0.0190$). Technically, participants neither agreed nor disagreed, on average, that they knew at least one woman similar to the characters created by Western developers ($\bar{x}=3.16$), However, they disagreed, on average, with knowing at least one woman similar to those in games created by Asian developers ($\bar{x}=2.24$).

We also observed a variety of open-ended responses that directly recognized cultural components of video game developers as well as their impact on woman character development. For example, three participants explicitly mentioned Japanese culture and context for development/consumption when describing Witch Spring R ('*Japanese-made*'; '*J-game for a J-Audience*'; '*Her creators might have hailed from Japan*'). Another described this character saying she is '*cute and her speech being kawaii.*'

We use cultural context to describe the customs, norms, values, and language surrounding a community. Our findings indicate participants implicitly and explicitly reacted to cultural influences in the sampled games, notably, when they live in the same cultural context as the game's developers. For developers, these results should indicate how their experiences may influence content, and how it may resonate with different players.

Perceived characterization and character roles

We observed that participants—especially in aggregate—often explained their perceptions of characterizations and character roles in sampled introductions using oppositional descriptors. We coded 62 comments out of 110 open-ended responses (56.36%) with one or more of the following codes: Strong vs Weak, Main vs Support, and Important vs Basic. Strong vs Weak Characterization and Main vs Support were our two most common codes applied overall. Moreover, participants used descriptors from multiple oppositional axes, perhaps describing a character as weakly characterized, in a supportive role, and basic.

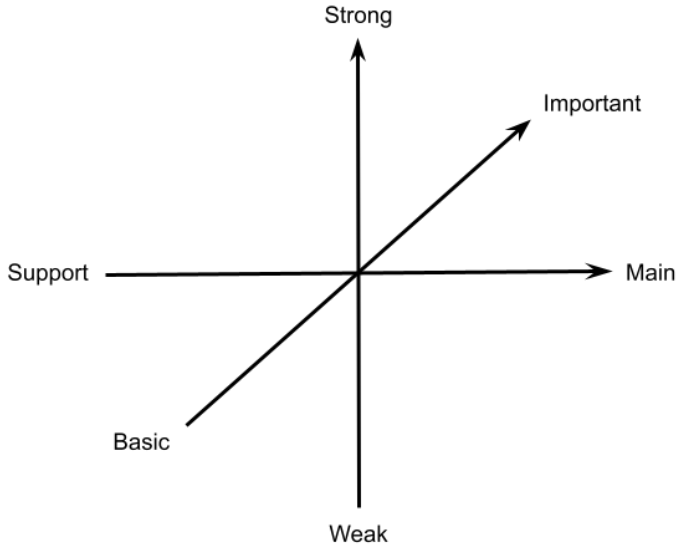

Figure 3. Three-dimensional axes of oppositional descriptors

We used strong vs. weak characterization to describe participant comments about the general depth and complexity of game characters. Participants did not always use the words '*strong*' or '*weak*', but referring in some way to general complexity, detail, or lack of either were cause for applying the code (e.g., '*very strong characters and personalities*', '*headstrong*', '*[not for use of strong, but strong impression of character]*', '*pretty vague*', '*very little detail*', '*lack depth*', '*understated or flat*'). Both similarly and conversely, we applied Main vs Support to participants using explicitly contextual or game-mechanical terms to describe characters' relative roles (e.g., main character, support character; '*helpers or one-off*', '*assistive to the main character*'). We applied Important vs. Basic to participant comments discussing a character's perceived overall relevance to the narrative (e.g., primary cast member or once-met NPC; "helpers or one-off" again).

We should also note that while we saw comments on both sides of these oppositions, participants more frequently described characters in our sample as weak, supportive, and/or basic. For example, from the 38 responses coded with '*strong vs weak characterization*', 32 contained comments about weaker characterizations while only 11 contained comments about stronger characterizations; we had five responses that discussed both ends at the same time. We received multiple similarly worded comments relating women characters to the more negative sides of oppositions and men characters to the more positive sides:

> *It seems like for most of the female characters presented here serve a role to aid the protagonist/player in some way, making them important to plot, but don't serve any further purpose. Then there are the female characters that we actually play as and see their perspective. They seem to exert more personality to a degree.*'; '*It seems like most female characters were side characters that help the main protagonist. Though some*

clips showed strong female leads which I believe to be was nice to see'; '*They all seem to be like not thoroughly represented to me.*'; '*Most of the time seemed to be side characters with little depth beyond what is required to give a mission*'; '*Apart from a few exceptions most of the presented roles seem to be assistive to the main character.*'

Although participants occasionally mentioned some '*strong*' women characters, an overwhelming amount of responses discussed that all or most women characters portrayed in these games seemed to have shallow characterization and assistive roles.

Time and dialogue

Overall, we observed that all participants, on average, felt neither the time nor dialogue of the sampled introductions were sufficient or insufficient enough to understand sampled characters. In fact, we saw near consensus across all six games—with several p-values above .95—with participants neither agreeing nor disagreeing (averaging 3.11 and 3.24, for time and dialogue respectively) that time or dialogue of the introductions were sufficient to even begin to understand these characters. We did not find a significant difference between responses to these questions based on demographics, individual games, across all six games, or whether games were women-led or not. Although neutrality itself is not a finding, in this case it presents an inconclusive result when attempting to analyse participant perceptions.

Despite the neutrality displayed, on average, in our closed-ended questions, many open-ended responses discuss the seemingly incompleteness and length of introductions or the depth and quality of the dialogue. Several participant comments coded with time—to refer to explicit references to the concept—expressed that the introductions felt '*understandably short*', '*to the point*', '*rushed*', '*unexplained*', *or* '*did not have much introduction time.*' Similarly, many comments coded with dialogue—for the same reason as time—described it as '*pretty vague*' *or* clearly stated that '*none [of the characters] had sufficient enough dialogue.*' The inconclusive contrast between expressive open-ended responses and neutral quantitative responses suggests there may have either/both been underlying issues with our survey construction, or the content of the clips we used themselves, discussed below

Limitations and opportunities

We identified two main limitations during data collection and analysis. These included a non-generalizable level of diversity in our participants and details of sampling.

Partly due to our recruiting method, the majority of respondents were 18-25 years old, likely from North America, and identified English as their first language, meaning our sample is not representative. However, the sample is more diverse along racial and gendered lines than a representative sample, meaning we were able to observe the perceptions of historically underrepresented groups at a higher rate. Still, there is an opportunity for future studies to sample wider age groups and broader cultural and geographic communities.

Despite challenges with clip duration and selection, our selection of only six games ranked as best-sellers on Steam November in 2023 does limit analysis and leaves room for potential biases. Our sample, and analysis represents a snapshot of the medium and market. Greater sampling, or repeat studies are necessary for broader or more historical analysis of the medium and market over time. A future project could focus on people in a different region or context (e.g., Asia, Europe, or S. America) or experiment with other modes of delivering clips with the same study to see if the same findings are replicable.

Discussion

Cultural context

Our findings reinforce the notion that the perceptions and assumptions of developers are embedded in the games they make—and that players and non-players alike are often aware of this influence, if only implicitly. We did not in any way indicate the development context of games in our survey, nor did we intentionally sample three western-developed games and three Asian-developed games. Yet, participants observed differences in the characters and narratives between these groups of games and found they were more familiar with women characters developed in their own likely cultural context. These findings highlight how important it is to consider cultural contexts when developing or analysing character designs and narratives—especially when they are introduced or creating their first impressions—or when examining how potential players perceive those characters.

Our study suggests that if game makers want to develop characters that resemble women from more diverse cultural contexts, they need to include more diverse perspectives in the development process–specifically in roles with significant influence on the creation of character narratives or their narratives.

The use or production of culturally-linked stereotypes and tropes may also influence how potential players—and those around them—perceive game characters. Our analysis highlights how sexist representations previously analysed by many scholars described in sections 2.1 or 2.3, such as Summer and Miller's emphasis on oversexualization of women in game-related media compared to men, may be more closely tied to regional, cultural contexts than previous scholars have acknowledged (2014). Better understanding how developer and player perceptions influence—or are impacted by—characters is important for mitigating the perpetuation of stereotypical conceptualizations that reinforce negative representations of certain groups in games.

Perceived characterization and character roles

Our three-axes visualization allows future researchers to pivot from Likert scales to ask different, more specific, sorts of questions as part of surveys, interviews, or focus groups. How participants, players, or potential players might *chart* their perceptions allows us to ask more precise questions about, for example, '*how*' and '*why*' they may position certain characters, or how/why they position them relative to each other—potentially inviting deeper, multi-dimensional insights even in relatively brief interactions.

Such frequent use of specific oppositional descriptors also urges researchers to question *why* we are seeing this trend in the first place. Perhaps participants genuinely perceive men and women as oppositional descriptors, or perhaps women characters are developed and presented to fit within the three axes. Either way, our visualization can help encourage research questions that reflect on these oppositions, their origins and beg a deeper understanding of game consumer's perception.

Participants leaning toward describing presented portrayals of women characters on the weaker, supporting, basic ends of identified axes suggests that game developers should be mindful of their perceptions on gender when developing characters. As discussed in the previous section, it is likely that perceptions of game developers are embedded in their creations. Hence, bringing more women's perspectives to the workspace may help towards robust character development and overall success of the game if game developers aim to improve women representation in video games.

Time and dialogue

The inconclusiveness we observed on the '*sufficiency*' of time and dialogue in introductions may stem from the durations of clips, the content of clips, or how we described/presented/asked about clips/introductions. Because we were presenting participants with 6 clips of footage, we

attempted to make clip durations digestible. It is tempting to consider adjusting clip durations—perhaps making them longer—as an immediate fix. Our focus on clip quantity may have influenced the neutral responses, on average, perhaps due to participants hurrying through or due to clips actually being too short but participants being uncertain how to respond. However, because participants perceived them as neither sufficient nor insufficient, simply changing or increasing the duration of clips could remain ineffective in identifying participant perceptions. Alternatively, the nature of the in-game introductions our clips contain may be the issue. In this case, participants' neutral consensus could be communicating, on average, that time and dialogue simply did not positively or negatively affect their understanding of the characters. The inconclusiveness, then, may be driven by the quality of dialogue, narrative, or overall characterization. As an additional note, we also must acknowledge in hindsight that participants may have understood the use of '*introduction*' in two ways: the character's in-game treatment or the clip itself embedded in the survey.

Modifying question structure and asking additional questions to clarify how time and dialogue affect participant perceptions and better acknowledging how the quality of character introductions can affect initial understandings of the character can help similar studies avoid similar inconclusive results. Rephrasing questions can reduce potential misinterpretations of '*introduction*'. Asking high-level questions about how participants consider the role of time and dialogue to influence their experiences, or about the quality of sampled introductions can provide better understanding of how they perceive those introductions. However, it bears mention that the issue may simply be issues with the inherent quality of those introductions themselves and a need for developers to produce introductions that allow participants to develop initial understandings of characters more effectively.

Conclusion

This study contributes to a better understanding of how potential players perceive and feel about representation in games and media, using a sample of six introductions of women characters from best-selling games. Our analysis highlights three key findings describing how participants' perceptions reflect and respond to cultural context, reflect multidimensional understandings of character roles, and are potentially influenced by the limitations of time and dialogue. The first two findings provide considerations for future researchers and game developers aiming to develop complex and culturally diverse women characters. Our findings suggest that if game developers want players from more diverse cultures to connect to their game, they need more intercultural design leadership, and consider localization as *part* of design not a translation of it. The last finding helps researchers to structure similar studies to observe perceptions quantitatively more precisely and consider how the quality of character introductions may impact understanding.

Narratives can tell us more about who characters are beyond their appearance–especially the introduction where first impressions are made by the player. These introductions may set their understanding of a character's potential role, personality, story, or their perceived importance to the game. Introductory dialogue influences perceptions of how these women are presented, and the state of the medium inhabited by these characters. Scholars such as Shaw have described how representation and narratives influence what players even recognize as possible ways of '*being*' in the world (2017). Attending to the themes we identify can help anyone designing or researching characters and their introductions or working with diverse groups to make the medium and industry more inclusive.

Acknowledgments

The iSchool Inclusion Institute, Kayla Booth and Joe Sanchez who connected us all, and supported our team from start to end of this project.

About the authors

Nani Le Tang is an undergraduate student studying Informatics with a focus in UX Design and Design Strategies at The University of Texas at Austin. Her research interests are in understanding and improving the experiences of people in media and technology, focusing on user research, interfaces, and accessibility. She can be contacted at nanitangux@gmail.com

Erin Eungyo Moon is a graduate student in Heinz College, Carnegie Mellon University, studying Information Security Policy and Management. They received their B.S. in Social Justice Informatics in the University of Texas at Austin. They can be contacted at emoon@andrew.cmu.edu

José De Jesús Garrido Iñiguez is an undergraduate student specializing in Game Design and Development at Indiana University Indianapolis. He primarily focuses on producing creature or character concept art during preproduction and furthering designs into the implementation stages. They can be contacted at jgarrid@iu.edu

Daniel Raul Mena Ramirez is a Technology Support Specialist at eMetric. He received his bachelor's degree in Information Systems and Cyber Security from The University of Texas at San Antonio. His research interests are in the documentation of the influence technology has on social expectations. He can be contacted at dan.ram.3611@gmail.com

Daniel L Gardner is a lecturer of computing and game design at Robert Gordon University. He examines inequitable interactions enabled or enforced by interfaces and infrastructures on the periphery of digital games and media. He primarily examines transactions of authority and exclusion mediated by access controls, character configuration, and physical interfaces/controllers that disproportionately affect historically marginalized communities.

References

Aghazadeh, S.A., Burns, A., Chu, J., Feigenblatt, H., Laribee, E., Maynard, L., Meyers, A.L., O'Brien, J.L. and Rufus, L. (2018). GamerGate: A case study in online harassment. Online harassment, 179-207.

Allen, M.L. (2023). "How is it that Someone Like You: paragon, Damn Near Saint; Could Love this World so Damn Much but No One in It?": Horizon Zero Dawn's Aloy and the Disruption of Hetero-Amatonormative Benevolent Sexism in Female-led Games. Games and Culture.

American Gaming Association (AGA). (2024). 2024 Gaming Industry Workforce Diversity Report.

Auerbach, D. (2014). Letter to a young male gamer. Slate Magazine.

Beasley, B. and Collins Standley, T. (2002). Shirts vs. skins: Clothing as an indicator of gender role stereotyping in video games. Mass Communication & Society, 5(3), 279-293.

Behm-Morawitz, E. and Mastro, D. (2009). The effects of the sexualization of female video game characters on gender stereotyping and female self-concept. Sex roles, 61, 808-823.

Bezio, K.M. (2018). Ctrl-Alt-Del: GamerGate as a precursor to the rise of the alt-right. Leadership, 14(5), 556-566.

Birk, M.V., Atkins, C., Bowey, J.T. and Mandryk, R.L.May. (2016). Fostering intrinsic motivation through avatar identification in digital games. In: Proceedings of the 2016 CHI conference on human factors in computing systems, 2982-2995.

Boellstorff, T. (2008). Coming of age in Second Life: An anthropologist explores the virtually human. Princeton University Press.

Bowey, J.T., Depping, A.E. and Mandryk, R.L. (2017). May. Don't talk dirty to me: How sexist beliefs affect experience in sexist games. In Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems, 1530-1543.

Breuer, J., Kowert, R., Festl, R. and Quandt, T. (2015). Sexist games= sexist gamers? A longitudinal study on the relationship between video game use and sexist attitudes. Cyberpsychology, Behavior, and Social Networking, 18(4), 197-202.

Burgess, M.C., Stermer, S.P. and Burgess, S.R. (2007). Sex, lies, and video games: The portrayal of male and female characters on video game covers. Sex roles, 57, 419-433.

Butt, M.A.R. and Dunne, D. (2017). Rebel girls and consequence in life is strange and the walking dead. Games and Culture, 14(4), 430-449.

Campbell, C. (2014). Sarkeesian driven out of home by online abuse and death threats. Polygon.

Campbell, C. (2018). Game companies are failing on diversity, according to new report. Polygon.

Carvalho, L.P. and Cappelli, C. (2018). Sexism and League of Legends: NFR aesthetic analyses. In: Anais da V Escola Regional de Sistemas de Informação do Rio de Janeiro, 38-45.

Condis, M.A. (2015). The politics of gamers: identity and masculinity in the age of digital media. University of Illinois at Urbana-Champaign.

Cote, A.C. (2017). “I can defend myself” women’s strategies for coping with harassment while gaming online. Games and culture, 12(2), 136-155.

Cote, A.C. (2018). Writing “Gamers” the gendered construction of gamer identity in Nintendo power (1994–1999). Games and Culture, 13(5), 479-503.

Cote, A.C. (2020). Gaming sexism. In Gaming Sexism. New York University Press.

Cullen, A.L. and Ruberg, B. (2019). August. Necklines and'naughty bits' constructing and regulating bodies in live streaming community guidelines. In Proceedings of the 14th International Conference on the Foundations of Digital Games, 1-8.

Curtis, E.D. (2015). In the game of patriarchy: The damsel in distress narrative in video games. The University of Alabama.

Desai, N., Zhao, R. and Szafron, D. (2017). Effects of gender on perception and interpretation of video game character behavior and emotion. IEEE Transactions on Computational Intelligence and AI in Games, 9(4), 333-341.

Dill, K.E. and Thill, K.P. (2007). Video Game Characters and the Socialization of Gender Roles: Young People’s Perceptions Mirror Sexist Media Depictions. Sex Roles 57, 851–864.

Doerrer, B. and Campaign Live. To reach diverse audiences, game developers must transform from within" from Campaignlive.com, https://www.campaignlive.com/article/reach-diverse-audiences-game-developers-transform-within/1804774.

Downs, E. and Smith, S.L. (2010). Keeping abreast of hypersexuality: A video game charTo reach diverse audiences, game developers must transform from within | Campaign USacter content analysis. Sex roles, 62, 721-733.

Duggan, M. (2015). Gaming and Gamers. PEW Internet Research.

Duggan, M. (2015). Which Americans play video games and who identifies as a 'gamer.' PEW Internet Research.

Edidin, R. (2014). She was harassed by a games reporter. Now she's speaking out. Kotaku.

Elderkin, B. (2023). GDC 2023 State of The Game Industry: Devs Weigh in On the Metaverse, Player Toxicity, And More" GDC conference.

Electronic Software Association (ESA). 2023). 2023 Essential Facts about the Video Game Industry.

Fletcher, J. (2012). Sexual harassment in the world of video gaming. BBC News Magazine.

Fox, J. and Bailenson, J.N. (2009). Virtual virgins and vamps: The effects of exposure to female characters' sexualized appearance and gaze in an immersive virtual environment. Sex roles, 61, 147-157.

Fox, J., and Tang, W.Y. (2014). Sexism in online video games: The role of conformity to masculine norms and social dominance orientation. Computers in human behavior, 33, 314-320.

Fragen, J. (2023). Steam's top 10 games captured over 60% of revenue in 2023, https://venturebeat.com/games/video-game-insights-steam-pc-revenue-consolidation/.

Freeman, G. and Maloney, D. (2021). Body, avatar, and me: The presentation and perception of self in social virtual reality. Proceedings of the ACM on human-computer interaction, 4(CSCW3), 1-27.

Friedberg, J. (2015). Gender games: A content analysis of gender portrayals in modern, narrative video games.

Gabbiadini, A., Riva, P., Andrighetto, L., Volpato, C. and Bushman, B.J.: Acting like a tough guy. (2016). Violent-sexist video games, identification with game characters, masculine beliefs, & empathy for female violence victims. PLoS one, 11(4).

Gardner, D.L. and Corvite, S. (2023). First Impressions: Effects of Representation on Video Game Covers.

Gardner, D.L. and Hacker, K. (2022). Prosthetic Metaphors, Rejection, and Representation in Games. In Proceedings of Digital Games Research Association Annual Meeting.

Gardner, D.L. and Tanenbaum, T.J. (2018). Dynamic demographics: lessons from a large-scale census of performative possibilities in games. In Proceedings of the 2018 CHI Conference on human factors in computing systems, 1-12.

Gestos, M., Smith-Merry, J. and Campbell, A. (2018). Representation of women in video games: A systematic review of literature in consideration of adult female wellbeing. Cyberpsychology, Behavior, and Social Networking, 21(9), 535-541.

Glaubke, C.R., Miller, P., Parker, M.A. and Espejo, E. (2001). Fair play? Violence, gender, and race in video games.

Gonzalez, A., Gomez, E., Orozco, R., Jacobs, S. (2014). Entering the Boys' Club: An Analysis of Female Representation in Game Industry, Culture, and Design. IConference 2014 Proc.

Gray, K.L., Buyukozturk, B. and Hill, Z.G. (2017). Blurring the boundaries: Using Gamergate to examine "real" and symbolic violence against women in contemporary gaming culture. Sociology compass, 11(3).

Hart, C. (2017). Getting into the game: an examination of player personality projection in videogame avatars. Game Studies vol.17(2).

Heritage, F. (2022). Magical women: Representations of female characters in the Witcher video game series. Discourse, Context & Media, 49.

Huh, S. and Williams, D. (2010). Dude looks like a lady: Gender swapping in an online game. Online worlds: Convergence of the real and the virtual, 161-174.

International Game Developers Association (IGDA). (2022). Developer Satisfaction Survey 2021 Diversity in the Game Industry Report.

Jansz, J. and Martis, R.G. (2007). The Lara phenomenon: Powerful female characters in video games. Sex roles, 56, 141-148.

Kennedy, H.W. (2002). Lara Croft: Feminist icon or cyberbimbo?. Game studies, 2(2), 1-12.

Kennedy, H.W. (2018). Game jam as feminist methodology: The affective labors of intervention in the ludic economy. Games and Culture, 13(7), 708-727.

Klastrup, L. and Tosca, S. (2009). "Because it just looks cool!" - Fashion as character performance: The Case of WoW. Journal For Virtual Worlds Research 1(2): 1–17.

Koh, C.J. and Das, R. (2017). Female preferences in video games: a literature review. Gender in Science & Technology, 20.

Kondrat, X. (2015). Gender and video games: How is female gender generally represented in various genres of video games?. Journal of comparative research in anthropology and sociology, 6(01), 171-193.

Lankoski, P. (2002). Character design fundamentals for role-playing games. Beyond Role and Play, 139-148.

Lenhart, A., Kahne, J., Middaugh, E., Macgill, A.R., Evans, C., and Vitak, J. (2008). Teens, Video

Games, and Civics: Teens' Gaming Experiences Are Diverse and Include Significant Social Interaction and Civic Engagement. Pew internet & American life project.

Lenhart, A., Smith, A., Anderson, M., Duggan, M., and Perrin, A. (2015). Teens, Technology & Friendships: Video games, social media and mobile phones play an integral role in how teens meet and interact with friends" Pew Research Center.

Leonard, D. (2003). Live in your world, play in ours: Race, video games, and consuming the other. Studies in media & information literacy education, 3(4), 1-9.

Leonhardt, M. and Overå, S. (2021). Are there differences in video gaming and use of social media among boys and girls?—A mixed methods approach. International journal of environmental research and public health, 18(11).

Liu, H. (2018). Early adolescents' perceptions and attitudes towards gender representations in video games.

Lucas, R. (2019). Out of the Margins: Evolving Narrative Representation of Women in Video Games.

Lynch, T., Tompkins, J.E., Van Driel, I.I. and 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.

MacCallum-Stewart, E. (2014). 'Take That, Bitches!'Refiguring Lara Croft in Feminist Game Narratives. Game Studies, 14(2).

Maclean, E. (2016). Girls, guys, and games: How news media perpetuate stereotypes of male and female gamers. Press Start, 3(1), 17-45.

Massanari, A. (2017). # Gamergate and The Fappening: How Reddit's algorithm, governance, and culture support toxic technocultures. New media & society, 19(3), 329-346.

Masso, I.C. (2011). The grips of fantasy: The construction of female characters in and beyond virtual game worlds. In Creating Second Lives (113-142). Routledge.

McArthur, V. (2020). Damsel in this Dress: an analysis of the character designs of women in post-secondary game design programs. Feminist Media Studies, 21(3), 381-397.

Miller, M.K. and Summers, A. (2007). Gender differences in video game characters' roles, appearances, and attire as portrayed in video game magazines. Sex roles, 57, 733-742.

Mortensen, T.E. (2018). Anger, fear, and games: The long event of# GamerGate. Games and Culture, 13(8), 787-806.

Mou, Y. and Peng, W. (2009). Gender and racial stereotypes in popular video games. Handbook of research on effective electronic gaming in education, 922-937.

Nakamura, L. (2019). Gender and race in the gaming world. Society and the Internet: How networks of information and communication are changing our lives, 127-45.

Nguyen, T., Khan, N., Berardi, A., Corvite, S., Norman, C., Gardner, D. (2020). Exploring the perceptions of race on video game covers. IConference 2020 Proc.

Ochsner, A. (2017). Reasons why: Examining the experience of women in games 140 characters at a time. Games and Culture, 14(5), 523-542.

O'Leary, A. (2012). In virtual play, sex harassment is all too real. The New York Times, 2.

Passmore, C.J., Yates, R., Birk, M.V. and Mandryk, R.L. (2017). Racial diversity in indie games: Patterns, challenges, and opportunities. In Extended abstracts publication of the annual symposium on computer-human interaction in play, 137-151.

Perreault, M.F., Perreault, G.P., Jenkins, J. and 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.

Phan, M.H., Jardina, J.R., Hoyle, S. and Chaparro, B.S. (2012). Examining the role of gender in video game usage, preference, and behavior. In: Proceedings of the human factors and ergonomics society annual meeting . Sage CA: Los Angeles, CA: Sage Publications. 56(1), 1496-1500.

Qin, H., Patrick Rau, P.L. and Salvendy, G. (2009). Measuring player immersion in the computer game narrative. Intl. Journal of Human–Computer Interaction, 25(2), 107-133.

Reza, A., Chu, S., Nedd, A. and Gardner, D. (2022). Having skin in the game: How players purchase representation in games. Convergence, 28(6), 1621-1642.

Ruberg, B., Cullen, A.L. and 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.

Saldaña, J. (2015). The Coding Manual for Qualitative Researchers. Sage Publications Ltd.

Salter, A., Blodgett, B. (2017). Come get some: damsels in distress and the male default avatar in video games. Toxic Geek Masculinity in Media: Sexism, Trolling, and Identity Policing, 73-99.

Scharrer, E. (2004). Virtual violence: Gender and aggression in video game advertisements. Mass Communication & Society, 7(4), 393-412.

Shaw, A. (2009). Putting the gay in games: Cultural production and GLBT content in video games. Games and Culture, 4(3), 228-253.

Shaw, A. (2014). Gaming at the edge: Sexuality and gender at the margins of gamer culture. U of Minnesota Press.

Shaw, A. (2017). "Diversity without defense: Reframing arguments for diversity in games." In Kinephanos: Journal of Media Studies and Popular Culture, July, 54-76.

Shaw, A. and Friesem, E. (2016). Where is the queerness in games?: Types of lesbian, gay, bisexual, transgender, and queer content in digital games. International Journal of Communication, 10, 13.

Sherman, S.R. (1997). Perils of the princess: Gender and genre in video games. Western folklore, 56(3/4), 243-258.

Shliakhovchuk, E. and Muñoz García, A. (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.

Solska, D. (2022). The evolving female narrative in dystopian video games: the case of BioShock Infinite, The Last of Us, and Horizon: Zero Dawn. Currents, 7.

Stermer, S.P. and Burkley, M. (2015). SeX-Box: Exposure to sexist video games predicts benevolent sexism. Psychology of Popular Media Culture, 4(1), 47.

Summers, A., and Miller, M.K. (2014). From damsels in distress to sexy superheroes: How the portrayal of sexism in video game magazines has changed in the last twenty years. Feminist Media Studies, 14(6), 1028-1040.

Super Mario Wiki. (n.d.). List of Princes Peach quotes, https://www.mariowiki.com/List_of_Princess_Peach_quotes.

Tomkinson, S.: "She's Built Like a Tank". (2023). Player Reaction to Abby Anderson in The Last of Us: Part II. Games and Culture, 18(5), 684-701.

Tompkins, J.E., Lynch, T., Van Driel, I.I. and 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 & Electronic Media, 64(2), 236-254.

Tompkins, J.E. and Martins, N. (2021). Masculine pleasures as normalized practices: Character design in the video game industry. Games and Culture, 17(3), 399-420.

Ugolotti, V.C., Brusk, J. and Engström, H. (2020). Crying in the Game-An inductive analysis of a game that portraits benevolent sexism. In: Proceedings of the 14th International Conference on Game Based Learning, ECGBL.

Unknown creator. (n.d.). Video Game Logic - Protagonists, https://knowyourmeme.com/photos/787777-video-game-logic.

Weber, R. (2012). 1ReasonWhy-The night Twitter took on the industry's sexism. GamesIndustry.

Williams, D. (2003). The video game lightning rod. Information Communication & Society, 6(4), 523-550.

Williams, D., Consalvo, M., Caplan, S. and Yee, N. (2009). Looking for gender: Gender roles and behaviors among online gamers. Journal of communication, 59(4), 700-725.

Wingfield, N. (2014). Feminist critics of video games facing threats in 'GamerGate'campaign. The New York Times, 15.

Wirtz, B. and Gamedesigning.org. (n.d.). The Issue of Diversity in gaming, https://www.gamedesigning.org/gaming/diversity/.

Wood, J.R. and Wood, L.E. (2008). Card sorting: current practices and beyond. Journal of Usability Studies, 4(1), 1-6.

Yao, M.Z., Mahood, C. and Linz, D. (2010). Sexual priming, gender stereotyping, and likelihood to sexually harass: Examining the cognitive effects of playing a sexually-explicit video game. Sex roles, 62, 77-88.

Zippia. (n.d.). Video game developer demographics and statistics in the US, https://www.zippia.com/video-game-developer-jobs/demographics/.

© CC-BY-NC 4.0 The Author(s). For more information, see our Open Access Policy.