

EXPLORING EMPATHY AND INTERSECTIONALITY IN GAMING: A CASE STUDY OF *SWEETXHEART* (SMALL, 2019)



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ABSTRACT

This study examines the ability of the game *SweetXHeart* – a genre-defying slice-of-life creation by Catt Small (2019) – to promote empathy and consciousness of microaggressions, specifically among participants whose characteristics differ from the game's main character – a white male-dominated sample. The study included 39 undergraduate students from a Bachelor's Degree in videogames, offering a distinct chance to examine the reactions of this specific demographic to feminist and intersectional ideas in gaming. After playing the game, participants were surveyed, and a mixed-methods approach, including quantitative and content analysis, was applied to their answers. The obtained results emphasize how players gain empathy by adopting the game character's perspective and experiencing her life, and fostering connections. However, the game's effectiveness in raising awareness depends on the participants' understanding of intersectionality and the challenges faced by people in positions of privilege. Further research is needed to fully understand this, and other similar game's impact on understanding and addressing gender and race issues.

Keywords: Gaming; Empathy; Microaggressions; Intersectionality; Gender.

The capacity of videogames to have a significant social impact has gained more attention in recent years (Neves et al., 2023; Papoutsi, & Drigas, 2016). Grace (2020) emphasizes the inherent characteristics of interactivity and the ability to offer instant feedback as crucial elements that make videogames a powerful medium for exploration and transformation. These characteristics not only make it easier to create deeply engaging experiences, but also provide distinct possibilities for fostering empathy, a vital component in improving our comprehension of the human condition, as highlighted by Greitemeyer and Osswald (2010).

Moreover, the domain of videogames has transcended mere amusement, delving into the realm of social interventions (Neves et al., 2023), from which is possible to emphasize how gender equality and feminism can be explored through gameplay (Westecott, 2018). To this extent, Barrera Yañez et al. (2020) underscored the potential of gaming interventions to address gender equality issues, suggesting a significant advancement in the utilization of this interactive medium. Within the domain of gaming as a performative medium, digital games afford players the opportunity to explore gender identities distinct from their real-world experiences. Game camera use provides varying levels of engagement, spanning from the intimate first-person perspective to the diverse viewpoints of the third-person perspective. Consequently, the portrayal of gender roles in games is contingent upon specific contexts. Furthermore, select titles offer limited customization options that empower players with a degree of control over their in-game appearance (Westecott, 2018).

Although the persuasive and activist potential of digital games is already clear, the response to them is diverse upon their launch, and only a limited number of case studies exist that analyze the efficacy of their messages (Anderson-Barkley, & Foglesong, 2018). Moreover, these studies should be based on a theoretical framework that acknowledges how individuals' multiple social identities, such as race, gender, class, and sexuality, intersect and interact, leading to unique and complex experiences of privilege and discrimination – intersectionality (Crenshaw, 1991). This need gains even more traction if we consider that, according to Ganzon (2022), gamers' communities and fandoms serve as “cultural contact zones” where the prevailing culture's normative whiteness and hegemonic masculinity can be both reinforced and challenged.

This study aims to explore the potential of the game *SweetXHeart* (Small, 2019) in promoting empathy and awareness of microaggressions, in a sample that is distinctly different from the character in the game. In addition, it aims to understand the vision of

future game designers and game developers regarding the adoption of an intersectional gaming lens, understanding their critical experiences of engaging with this slice-of-life game.

The present article starts by exploring what can be interpreted as gaming through an intersectional lens, highlighting the use of this perspective to promote inclusive and diverse gaming experiences, challenge stereotypes, and increase the representation of marginalized groups in both the community and the industry, through activist “meaningful play” (Chess, 2020). Afterwards, the state-of-the-art is concluded by identifying the existing gap – the need for more data on the potential of activist and persuasive games and the effectiveness of their messages (Anderson-Barkley, & Foglesong, 2018). The empirical experience is presented, alongside a detailed exploration of the game's aesthetic, narrative, and interactive elements, to consubstantiate a discussion that also emphasizes some horizons for the future of the research regarding game studies and audience studies, through an intersectional lens.

2. MEANINGFUL GAMING THROUGH AN INTERSECTIONAL LENS

Videogame analysis from an intersectional perspective has become a crucial and dynamic field of research in recent years. This lens entails the analysis of the intersection and interaction of diverse social identities, such as race, gender, class, sexual orientation, disability, and others, within the domain of gaming (Kafai et al., 2016; Rankin, & Irish, 2020; Sousa et al., 2022). This approach is especially pertinent considering the growing acknowledgement of videogames as a powerful medium for narrative and as a mirror of societal norms and values (Loderer et al., 2020).

Consequently, we can discuss a set of intersectional issues in leisure distribution (Chess, 2020) – which is the same to emphasize the need to discuss how a person's race, gender, socioeconomic status, age, disability, and sexual orientation can all play a role in shaping their access to leisure activities and resources. Applying this intersectional analysis framing to gamer cultures involves advocating for more inclusive and diverse gaming experiences, challenging stereotypes, and working towards greater representation of marginalized groups in both the gaming community and the industry (Kafai et al., 2016).

The topic of intersectionality in games can also be explored through their potential to raise awareness of the problems of different populations, foster learning and promote empathy. Intersectionality is, to this extent, rooted in the concept of meaningful play, as defined by Salen and Zimmerman (2003). In essence, it refers to the idea that a game should engage players in a way that goes beyond mere enjoyment, but also has intellectual, emotional, or social significance. Therefore, when individuals engage with a game, they should experience a sense of purpose, challenge, and satisfaction. Meaningful play involves explicit

goals and objectives, balanced challenges that stimulate critical thinking and strategic planning, and efficient feedback mechanisms to monitor progress.

From a feminist standpoint, and as we will see, “meaningful play advocates for leisure that functions both at a personal level, fulfilling self-care, and a broader level of cultural meaning” (Chess, 2020, p.59), through a leisure as activism perspective. By turning protests into a light-hearted and game-like experience, it changes how observers interact with its message and also decreases the perceived exertion required, thereby minimising potential hazards. Although games are commonly linked to individual or small-scale activities, it would be advantageous to broaden our understanding of “games” and contemplate transforming our surroundings into inclusive and interactive settings (Chess, 2020).

The notion that solitary play does not inherently entail isolation from the public sphere and social interactions can be linked to the concept of transforming protests into gamified experiences (Heljakka, 2023; Huang, & Liu, 2021). Although play is commonly regarded as an individual or small-group endeavour, it frequently takes place within the larger public setting (Heljakka, 2023) and entails interactions with others (Cote, 2018). When protests are transformed into games or interactive experiences, they cease to be separate occurrences and instead become integrated into the social fabric, encouraging onlookers to actively participate and engage with the message being conveyed by the protest (Chess, 2020). The gamification of activism is consistent with the idea that solitary play can have wider social consequences and is not limited to personal experiences (Heljakka, 2023). Therefore, through the application of an intersectional perspective, it becomes evident that solitary play, public engagement, and the gamification of protests are not merely individual or isolated occurrences, having a strong and complex connection with the social systems and the various identities of the individuals involved in them.

3. PERSUASIVE GAMES, EMPATHY AND OTHERNESS

Because of the presumed limited audience and appeal of activist-themed games, major AAA game companies generally refrain from developing them. This reluctance arises from the perceived risks associated with deviating from their established focus on mainstream entertainment. Consequently, most activist games are created by indie game developers who are either entirely self-funded, receive backing from entities like Games for Change¹, undertake commissioned projects from various organizations (Anderson-Barkley, & Foglesong, 2018), or engage in game development for research purposes, as is commonly the case with games centered around disabilities (Sousa, 2020).

Although they may not be of interest to the mainstream industry and there is a lack of wider evidence in the field of scientific research, some studies and cases can back the potential of activist and persuasive games and the effectiveness of their messages (Anderson-Barkley,

¹ For more see:
<https://www.gamesforchange.org/>

& Foglesong, 2018). This includes games such as *Homeless: It's Not a Game* (Lavender, 2006) – which showed the potential to increase players' sympathy for the homeless, by putting them in the role of one of these persons – or *Half the Sky Movement: The Game* (Burak, 2013) – designed to promote awareness of the inequality in which girls live throughout the world, through the enactment of real-world book and monetary donations (Dasgupta et al., 2012). Other examples mostly focus on war, and migration topics, including games like *Papers, Please* (Pope, 2013), *This War of Mine* (Włosek, 2013), or *Against All Odds* (UNHCR, 2012). More recently, the game *Dot's Home* (Narcisse, 2021) presented an intersectional lens to the game design process, by providing players with the experience of gentrification, from the viewpoint of a young black woman, and her family history.

If we look at these games, they have in common a demand to put the player in the character's metaphorical shoes, to advocate for their social or political cause, for the purposes of raising awareness or behavioral change – which Belman and Flanagan (2010) have identified as one of the key principles for empathy-promoting games. In fact, the premises of inclusive and reflexive game design must be intentionally embedded in digital games, if the designer's goal is to shape the players' perceptions, by expressing a wide range of human values, such as justice, respect, equality, and freedom through gameplay (Flanagan, & Nissenbaum, 2016).

Promoting empathy through games has been increasingly studied, with positive results, even in commercial titles, such as *Assassin's Creed* (Gilbert, 2019), being heavily linked to the notion of otherness (Grace, 2021; Salchert, 2021). According to De Oro et al. (2022), with the contemporary concerns regarding globalization – including issues like inclusion, racism, and immigration barriers – society's interest seems to converge in serious games and edutainment, with a specific focus on topics like mediation, social and behavioral schemes, otherness, interaction between subjects, and learning. To this extent, the obstacles that often stem from the negative perception of otherness – leading to rejection and the formation of isolated communities – can be tackled, through gaming, by creating cultural spaces that promote assertive encounters of diverse identities while addressing important aspects of relationships and interactions, such as equality, equity, and intersectionality.

4. SWEETXHEART (SMALL, 2019)

SweetXHeart, designed and developed by Catt Small (2019), presents a unique experience that challenges conventional genre classification, making it difficult to categorize. It combines visual novel, adventure, and life simulation elements and can be online, through a browser connection². The player assumes the persona of Kara (Figure 1), an African-American woman who is navigating the intricacies of life, employment, interpersonal connections, and personal growth.

² For more see:
<https://cattsmall.itch.io/sweetxheart>



Figure 1. Kara's reaction to the clothes chosen by the player for her. © Catt Small

The game's central theme centers on Kara's daily life and experiences, through the intersection of the different unprivileged conditions surrounding her – her race, her gender, her condition as a student worker, her socioeconomic conditions – and the microaggressions that emerge in the different contexts. The game adopts a slice-of-life approach, prompting players to interact with ordinary situations, mundane exchanges, and self-reflection. Players are responsible for making decisions that have an impact on Kara's life path, profession, and interpersonal relationships.

4.1. AESTHETIC AND NARRATIVE PROPOSAL

The visual aesthetics of *SweetXHeart* are captivating and thought-provoking. The game's art style is distinguished by a confident utilization of colors, emitting a sense of warmth and liveliness. The character design and environments adhere to a cartoonish, yet semi-realistic style, guaranteeing a visual experience that is both relatable and captivating. The game's auditory components, created mainly by Phu Nguyen, enhance the visual aesthetics. The music is a fusion of soulful tunes and electronic beats that set the mood for each scene. The sound design is meticulously incorporated, enhancing the game's audiovisual experience with added depth, atmosphere, and emotional induction.

With the game's narrative proposal, Catt Small embodies a premise addressed in a scholarly manner by Chess (2020, p. 27), namely by bringing to it, above all, the aesthetic sense of "plays like a girl". To this extent, the author proposes that "play like a girl" can configure a transformative process, from a misogynist insult to a revaluation to a markedly feminist charge, by adding an exclamation mark, which turns it into a "play of power – play like a girl!" (Chess, 2020, p.27). In previous work, Chess (2017) refers to how "girlie" games are often designed to operate with time, emotions, consumption habits and bodies in order to reinforce a "player two". This "player two" conceptually represents how

³ For more see:
<https://www.bing.com/images/create/>

women are often relegated to secondary or less important roles in the games industry and gamer culture, and this can manifest itself in various ways, such as a lack of adequate representation, the objectification of female characters and online harassment (Chess, 2017). The author's ideas can be substantiated with a simple practical exercise that is part of some of the contemporary debates on how AI represents human culture (Zajko, 2022). By inserting the prompt "create the poster of a digital game for girls" on DALL·E 3, through BING³, the obtained result is a mainly pink, and purple glittery anime female character, it's even possible to guess the shapes of her body (Figure 2). This representation, albeit symbolic, resonates with studies on sexiness as a primary form of representation of female characters in videogames (Burgess et al., 2007; Tompkins et al., 2020).



Figure 2. Image generated by artificial intelligence with the prompt "create the poster of a digital game for girls". © Catt Small

SweetXHeart's game design seems to adopt a reclaiming and transformative stance, almost akin to the disruptive use of offensive language towards discriminated groups as a form of activism – previously studied by authors such as Carnaghi and Maass (2008) – in what would be its equivalent of hypertext and playfulness. Figure 3 presents an example, where it mimics a digital dress-up game, as a strategy to engage players with different experiences women face in the streets, depending on the clothes they choose to wear. Every morning, the player needs to choose her clothes, only to find out later that different clothes will trigger different reactions in the Non-Playable Characters (NPCs) on the streets and at work.



Figure 3. Dressing up Kara each morning – different clothes will trigger different reactions from people in the streets and at work. © Catt Small

SweetXHeart (Small, 2019) embodies the essence of Chess's (2017; 2020) ideas by offering a narrative that disrupts traditional gaming norms. It reclaims the concept of "play like a girl" and empowers it as a form of play with a strong feminist charge. Through the game's narrative, players experience the complexities and challenges faced by women in various scenarios.

4.2. INTERACTION

The User Interface (UI) of *SweetXHeart* is friendly, reducing intricacy, as it enables players to concentrate on decision-making and character actions. The game provides a text-based interface that allows players to engage in dialogue and make decisions, enhancing their immersion in the storyline.

Player interaction is at the core of the game. The choices players make, while seemingly mundane, have a profound impact on Kara's life, shaping her experiences and relationships. These choices evoke a strong sense of agency and personal investment, encouraging players to connect emotionally with the character. For example, in Figure 4, the player is provided with three potential answers, when Kara is the victim of a "cat-call" in the streets, namely: (a) tell him to fuck off; (b) say there's no reason to; and (c) ignore and say nothing. Of these options, only (c) is always on the screen, reinforcing the character of a certain impulsiveness, but also of the framed anger of the other answers, especially answer (a) – which only has a few milliseconds to be selected. Through this type of unique interaction strategies, the game facilitates an interactive player experience that not only embraces the subtle emotional aspects of decision-making but also functions as a potent commentary on the intricate connection between emotion and rationality. The game presents players with the task of navigating a world where decisions are influenced not only by rational thinking but also by human emotions, leading to a

more captivating and intellectually stimulating gameplay experience, based on the premises of Hodent (2018).



Figure 4. Player’s possible answers to a “cat-call” Kara is victim.
© Catt Small

The game’s narrative proposal is its commitment to realism and inclusivity, by presenting a story of an African-American young woman, authentically representing her experiences, challenges, and aspirations. This focus on authentic storytelling challenges the industry's norms, fostering inclusivity and diversity in game narratives.

As well as being used to make the player better understand the emotional and personality aspects of Kara herself, dialogues and text-based interactions are resources for creating the context of the different Non-Playable Characters (NPCs), as shown in Figure 5. This makes it possible to get to know their traits better, basing decisions on them and anticipating their responses, adverse or otherwise.



Figure 5. Player’s possibilities to select a colleague from work to review an assignment. © Catt Small

5. METHODOLOGICAL APPROACH

5.1. PARTICIPANTS

The non-probabilistic sample of this study was composed of 39 students from the second year of the Bachelor's Degree in Videogames, from Lusófona University, aged between 19 and 23 years old ($M = 20.75$; $SD = 0.97$). The sample was predominantly male, comprising 32 people who identified themselves in this way (82.05%) and seven females (17.95%). This distribution seems to be in line with the asymmetries already documented in the digital games industry in Portugal (Lima, & Gouveia, 2020). The sample is also characterized by substantially high games literacy, considering their operational media production skills.

The study did not consider the overrepresentation of males as a bias, but instead, viewed it as an opportunity. This is because the research aimed to investigate the response of this demographic to games grounded in feminist and intersectional concepts. This perspective is particularly relevant in light of the rising prevalence of anti-feminist movements, such as “men’s rights” groups, “incel” communities, and the alt-right, as noted by Chess (2020, p. 36). Also noteworthy is the strong association of these groups with communities related to online gaming (Blodgett, & Salter, 2018; Hoffman et al., 2020).

Besides this, the fact that this sample is made up of future game designers and developers who could hypothetically become more sensitive to some types of prejudice present in society could be relevant for the future of the industry in general (Flanagan, & Nissenbaum, 2007). According to Gray (2014), people who are oppressed in the context of gaming, even if they manage to identify themselves and form cohesive groups, have little control over the reconceptualization of oppressive realities. Therefore, intervening with privileged and/or dominant demographics also becomes crucial.

5.2. PROCEDURE

The masking technique was employed to involve students in an activity described as focused on eliciting emotions through gameplay. This exercise was carried out as part of the “UX Design for Digital Games” course subject. The students were directed to complete *SweetXHeart*’s gameplay, with no other specific instruction. Masking, also referred to as blinding, is a method employed in research procedures, to minimize bias and uphold the integrity and truthfulness of the research. It entails deliberately hiding specific information – in this specific case, the research aim – or traits from one or more individuals participating in the research, to prevent their awareness or expectations from influencing the results (Creswell, & Creswell, 2018).

Following the completion of the gameplay, participants were asked to respond to a questionnaire consisting of three open-ended items, as follows:

- Describe a positive emotion you experienced during the gameplay, explaining the intensity of that experience;
 - * Describe the moment in the game when you experienced this positive emotion and which features of the game enhanced it;
- Describe a negative emotion you experienced during the gameplay, explaining the intensity of that experience;
 - * Describe the moment in the game when you experienced this negative emotion and which features of the game enhanced it;
- What do you think was the aim behind creating this game? In your particular case, was it successful?

The possible length of the answer was free, and most of the answers collected were between 4 and 6 lines long. The choice of open-ended questions, rather than more closed or standardized measures, was linked to the identification of this research as inherent in a critical theory paradigm. That is, an ontological vision based on historical realism, which values the socio-political context in which, in this case, the game was developed and played, as well as the power structures to which it is subordinated. This interactional and subjective epistemological vision allows the values of the researcher and the researched to be considered as dimensions of the study (Guba, & Lincoln, 1994).

The questionnaire was administered through an online form, which allowed for efficient data collection. The study spanned two consecutive academic years, covering the academic years 2020/2021 and 2021/2022. To ensure ethical compliance, participants were provided with informed consent before participating in the study. After data collection, a debriefing session was conducted to clarify the study's objectives, address any concerns, and provide additional information about the research, including the discussion of the willingness to continue with the participation. The data collected from the questionnaires were subsequently analyzed using content analysis – most specifically a balanced approach between quantitative and qualitative content analysis, as previously implemented in studies such as Casimiro et al. (2023), also for the study of human interaction with playable objects.

6. RESULTS

6.1. IDENTIFICATION OF MICROAGGRESSIONS AND REACTIONS

From the 39 participants in this study, 28 (71.79%) reported that Kara was the victim of some form of microaggression, with most of them identifying microaggressions related to her gender ($n = 25$; 89.29%), with an underrepresentation of the racially-motivated microaggressions ($n = 3$; 10.71%).

The detailed analysis of the gender-motivated microaggressions showed that most students ($n = 11$; 39.29%) were able to identify them, while a similarly large group ($n = 10$; 35.71%) were even able to show feelings of empathy towards the game character – which involves recognizing her feelings, experiences, and challenges and responding

in a way that acknowledges and validates them. On the other hand, four players (14.29%) discredit these experiences.

Regarding race-related microaggressions, only two players were able to identify such situations (7.14%), while one (3.57%) empathized with Kara's circumstances. Detailed results are presented in Table 1.

Table 1

Coded units of analysis for microaggressions, divided by the ones related to gender and the ones related to race issues

CATEGORY	n (%)
Related to Gender	25 (89.29)
Identity microaggressions	11 (39.29)
Show empathy for microaggressions	10 (35.71)
Discredit the microaggressions	4 (14.29)
Related to Race	3 (10.71)
Identify microaggressions	2 (7.14)
Show empathy for microaggressions	1 (3.57)
Discredit the microaggressions	0 (0.00)
TOTAL	28 (100.00)

Through a more critical lens, it was possible to gauge some more detailed players' reactions to *SweetXHeart*, including scepticism about character reactions and downplaying character experiences. The first theme was characterized by a sense of doubt regarding the character's emotional reactions and an anticipation for the character to respond differently in certain situations. Players exhibited astonishment or perplexity when the in-game character failed to react in the manner they had expected. This doubt frequently revolved around situations involving microaggressions. For instance, one player remarked, "I was a bit *oh, okay* when my character didn't react the way I expected her to when confronting someone. I thought she'd feel better for standing up to them". This sentiment highlights the players' inclination to project their own emotional expectations onto the character, leading to a sense of incongruence when those expectations are not met.

In addition, the analysis revealed that players occasionally minimized the character's emotional experiences in the game, categorizing them as insignificant or inconsequential, especially when it came to microaggressions. The players' responses demonstrated a tendency to downplay the character's emotional reactions. For example, a player noted, "Felt a bit of stress, but it was not that intense, and I personally didn't find some of these scenarios impactful at all". This perspective emphasizes the players' differing perceptions of the character's emotional experiences, potentially attributing less significance to the portrayed microaggressions than intended by the game's narrative. The findings indicate that players analyzed the character's responses and the representation of microaggressions in a thoughtful manner, emphasizing the intricate relationship between player expectations,

individual viewpoints, and the game’s storytelling decisions. The acknowledgement of scepticism and minimizing the significance of character experiences highlights the complex nature of player reactions to microaggressions within the game.

6.2. UNDERSTANDING THE PURPOSE OF THE GAME

When asked about the purpose of the game, players showed diverse interpretations and perceptions of *SweetXHeart*’s objectives and impacts. As shown in Table 2, the most prominent theme was the game’s effectiveness in raising awareness about the daily struggles of women ($n = 10$; 25.64%), and the impact of personal and third-party actions on emotions and well-being ($n = 5$; 12.82%).

Table 2
Players’s perceptions of the objective of *SweetXHeart*

CATEGORY	<i>n</i> (%)	EXAMPLE QUOTE
Avoid catcallers and harassment	3 (7.69)	“Avoid being harassed in the street. I didn't succeed.”
Show the impact of daily life choices on stress and anxiety	5 (12.82)	“If this game wanted to talk about the stress of everyday life, with every decision having a time limit, it succeeded.”
Show the impact of our actions on others	6 (15.38)	“The objective will be understanding the influence of our actions and the actions of others on our lives, and I think you have achieved your aim.”
Prevent the character from getting sad	3 (7.69)	“The aim of the game would be to control the character's emotions so that she doesn't get sad.”
Raise awareness about women's daily struggles	10 (25.64)	“The aim of the game would be to control the character's emotions so that she doesn't feel sad.”
Show the daily struggles of Kara in a misogynistic and racist world	5 (12.82)	“Raising awareness and empathy among players about the daily life of a black woman. In my case, it was successful, because even though it's just a game, it has a greater impact than just reading about it, experiencing it, or even playing it.”
Classifies the game as merely uninteresting	1 (2.56)	“It only causes disinterest and discourages the player from making decisions.”
They say they didn't understand the point and couldn't empathize with the character	1 (2.56)	“The game didn't make me empathise with the character.”
Recreate the life of someone who needs to balance study and work	2 (5.13)	“Recreate a week of a teenager who studies and works, and does it well.”
Promote the ability to express emotions	1 (2.56)	“Many times during the game we were asked whether we wanted to express what we really felt or hide our opinion so as not to hurt other people. So I think the aim was to show the impact this can have on a person in an everyday scenario.”
Show the ups and downs of life	2 (5.13)	“Realising that life has good times and bad times.”
TOTAL	39 (100.00)	

The perceptions of the game’s purpose, as shown in Table 2, express different levels of empathy with the character and their everyday

- problems. In this sense, the coding previously carried out has been grouped as follows, for a more explanatory approach:
- (a) Total or intersectional understanding of the game’s purpose: composed by the category “show the daily struggles of Kara in a misogynistic and racist world”, considering the way these are the only answers that intersect two axes of prejudice that target Kara – sexism and racism;
 - (b) Partial understanding of the game’s purpose: composed by the categories “raise awareness about women’s daily struggles” and “recreate the life of someone that needs to balance study and work”, considering that these players understood one component that characterizes Kara’s identity, either as a woman or as a working students, but in isolation;
 - (c) Empathetic misunderstanding (associated with a concern for the character) of the game’s purpose: composed by the categories “avoid catcallers and harassment”, “show the impact of daily life choices on stress and anxiety”, “show the impact of our actions on others”, “prevent the character from getting sad”, “promote the ability to express emotions”, and “show the ups and downs of life”. All these categories showed some concern or empathy for the character, but without critically addressing the systems of oppression that subject her, either separately, or as complex constructs;
 - (d) Total lack of understanding or empathy with the purpose of the game: composed by the categories “classifies the game as merely uninteresting” and “they say they didn’t understand the point and couldn’t empathize with the character”.

The full results of this grouped analysis are presented in Table 3, and show that most players did not understand the intersectional and critical nature of the different contexts that affect Kara and her daily life. Nevertheless, most of them show an empathetic attitude towards the character, with attitudes like trying to avoid her stress or sadness ($n = 20$; 51.28%), while twelve (30.77%) also show notions regarding some of the oppressive systems that subject her, even if in isolation. Five participants showed an intersectional understanding of the game’s purpose (12.82%), namely understanding how studying, working, and being a woman affects the character.

Table 3
Players’s perceptions of the objective of *SweetXHeart*, grouped by categories

CATEGORY	n (%)
(a) Total or intersectional understanding	5 (12.82)
(b) Partial understanding	12 (30.77)
(c) Empathetic understanding (associated with a concern for the character)	20 (51.28)
(d) Total lack of understanding or empathy	2 (5.13)

To summarize, the analysis of the responses reveals that players interpret the game's objectives in diverse manners, placing importance on themes such as empathy towards women's challenges, the impact of actions, the stress and repercussions of words, and the significance of promoting awareness about real-world matters concerning gender and race. Many players view the game as a useful tool for achieving these objectives, although there are varying interpretations and levels of success in attaining these goals.

7. DISCUSSION

The study explores the game *SweetXHeart*'s potential to foster empathy and raise awareness about microaggressions, focusing on a distinct demographic sample. It also seeks to understand future game designers' perspectives on intersectional gaming, focusing on their critical experiences while engaging with the game.

First and foremost, *SweetXHeart* offers players a chance to fully engage in Kara's everyday life encounters. Her experiences are influenced by her identity as a young Black woman and involve various difficulties, such as microaggressions based on gender and race. For players with diverse demographic backgrounds, this immersive experience can be enlightening and life-changing. By adopting Kara's point of view and experiencing her life, players acquire understanding of the challenges and biases she encounters, thereby cultivating empathy. According to one participant, "I experienced the daily life of being a woman/girl." This sentiment highlights the game's capacity to foster connections and promote understanding and empathy among players from different backgrounds.

With regard to raising awareness of the microaggressions the character is subjected to, the game proved to have the potential to promote their identification among the sample studied, when their motivation was gender, but not racial issues. To understand and substantiate this finding is complex and, most definitely, requires more research in the future. However, we can concentrate on one of the principles of games for empathy established by Belman and Flanagan (2010), which states that the effective involvement with these games should not result in substantial changes in players' beliefs about themselves, the world, or their relationship with the world. If we consider the distancing and difficulty of implementing a critical notion of otherness by mostly white communities in the post-colonial context (Harris, & Moffitt, 2019), this could be an explanatory factor.

In addition, the participants showed unequal levels of understanding regarding the intersectional lens through which these microaggressions could be seen, from the ability to understand them in a cumulative and complex way, to a more simplistic form of identification. This finding could be explained by different phenomena that address the biases of people in positions of privilege in understanding other conditions, and the power structures that underlie them. Here we could

include ambivalent racial consciousness (Nnawulezi et al. 2020) or “white feminism” as a dominant perspective in the gaming community (Gray, 2017).

Concerning the players’ perceptions about the purpose of the game included various themes that represent different responses and levels of comprehension. A significant number of participants ($n = 38$) regarded the game as a valuable instrument for fostering empathy towards the challenges faced by women and increasing awareness about the consequences of individual and external actions. The diverse interpretations of *SweetXHeart* demonstrate its capacity to function as a medium for involving players in real-life matters concerning gender issues. However, the degree to which these objectives are achieved varies, with only residual notions of intersectionality being exhibited.

8. LIMITATIONS, FUTURE DIRECTIONS, AND RESEARCH HORIZONS

While this study has shed light on various aspects of player responses to *SweetXHeart* and its potential to foster empathy and awareness of microaggressions, it is essential to acknowledge certain limitations that may have influenced the findings.

First, the study primarily focused on a sample of undergraduate students, a demographic that, while valuable, may not fully represent the broader gaming population. To enhance the generalizability of findings, future research should aim to diversify the participant pool to include a more extensive range of age groups, cultural backgrounds, and gaming experiences. This diversification is fundamental for ascertaining whether the observed responses are consistent across different player profiles. Secondly, it is important to recognize that the findings in this study are based on self-reported data. This methodology has inherent limitations as it could be influenced by recall bias and social desirability. Participants may not always provide entirely candid responses, which could impact the accuracy of the data. Future research might consider complementing self-report data with other methods to triangulate findings.

Thirdly, framing this study as a broad approach in the exploration of persuasive games might be misleading, since it is centered on one game only – *SweetXHeart* – and may not reflect how other games contribute to empathy and awareness of social issues, and intersectionality. Investigating a broader range of games with diverse narratives could provide a more comprehensive understanding of the gaming medium's potential. A comparative analysis of different games could yield insights into which game elements are more effective in promoting empathy and awareness.

From these notions, and more generally, horizons emerge for future research, from an intersectional perspective, that addresses games and their ability to persuade or, more broadly, to promote attitude change. This includes the exploration of game design principles' role in the systematic promotion of such change, and the assessment of the impact of games in different audiences, through methodologies similar to audience research,

through a gender-equality-driven, non-ableist, non-white dominated perspective.

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ACKNOWLEDGMENTS

This study was funded by national funds through the FCT - Foundation for Science and Technology, I.P., under project GameIN (2022.07939.PTDC) – available at <https://doi.org/10.54499/2022.07939.PTDC>. The author would also like to thank Daniel Cardoso and Pedro Pinto Neves for their support and willingness to discuss an earlier version of this research.

Article received on 15/10/2023 and accepted on 20/12/2023

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