Aloma 2011 | 28 | 245-272

Revista de Psicologia, Ciències de l'Educació i de l'Esport

ISSN: 1138-3194 Copyright © 2011

http://www.raco.cat/index.php/Aloma

Confronting gender representation: A qualitative study of the experiences and motivations of female casual-gamers

Andrea Lewis & Mark D. Griffiths

Abstract:

Women are playing video games in ever increasing numbers. However, the empirical literature has consistently shown that males play video games more frequently than females, that males play for longer periods, and that both genders are equally likely to view game playing as a masculine pursuit. As a consequence, a study was carried out to examine salient themes in the experiences and motivations of females who frequently play 'casual' video games. The participants comprised 16 adult female casual-gamers who completed two self-report online interviews (at the beginning and at the end of the study) and participated in an online blog/diary and discussion forum over a four-week period. The data were analysed for salient themes using Thematic Analysis. Results showed areas that were important to female casual-gamers included knowledge peripheral to games, domestic commitments and personal priorities influenced by gaming, and the social, financial, and emotional investment of games. By exploring the prominent themes underlying women's motivations to play casual games, the results provided potential new research directions for future research on women gamers from positively gendered perspectives.

Key words: video game playing, gender, thematic analysis

Correspondence: Mark Griffiths

International Gaming Research Unit Psychology Division Nottingham Trent University Burton Street Nottingham NG1 4BU United Kingdom mark.griffiths@ntu.ac.uk

Introduction

Video games are more popular than ever worldwide. The demographic profile of the typical player or 'gamer' is also changing, with an increasing average age and an equalising gender distribution (Entertainment Software Association, 2009). However, the literature consistently finds that males play video games more frequently than females, that they play for longer intervals (Williams, Yee, & Caplan, 2008; Ogletree & Drake, 2007; Griffiths, Davies, & Chappell, 2004; Phillips, Rolls, Rouse, & Griffiths, 1995), and that both genders are equally likely to view video game playing as a masculine pursuit (Selwyn, 2007). The gendering of video game play has been linked to low female motivation to play video games because of gender-role stereotyping (Lucas & Sherry, 2004) and has been paralleled to reduced female participation in areas like science, mathematics, and technology, where there is a historical perception of women as 'inferior' (see Cassell & Jenkins, 1998). Bryce and Rutter (2002) have argued that video game research must challenge the dominant gender stereotypes in gaming and focus on game-play as a "domestic" or leisure practice "in the context of everyday life" (p. 248), especially given the many genres of games, range of places in which to game and the popularity of domestic (non-public) and online gaming among females (Bryce & Rutter, 2003).

Thus, context and personal experience become crucial factors in generating an explanatory model of female motivation in gaming. To date, there is no research on female gamers in circumstances where females are the perceived dominant gamers. Female players are most pronounced in the 'casual games' industry (Krotoski, 2004), where they account for 51% of all players and 74% of the buyers (Casual Games Association, 2007). Casual games have simple rules, allowing players to "get into" game-play quickly, are highly accessible to novice players, and can belong to any game genre (Juul, 2009). Researchers focusing on gender and computer games have suggested that casual games are often overlooked as "real" games because of an "unarticulated aesthetic" in the gaming community that considers mastery of so-called hardcore games as a rite of passage to be a true gamer (Sweedyk & de Laet, 2005, p. 26). Carr (2005) argues that simply because hard-core gamers appear more committed to their gaming, it does not mean that they are "more representative or more credible" than casual-gamers (p. 468). As gender stereotypes persist regarding who is an 'avid' gamer, actual figures suggest that although males appear to play more than females, such findings are only true for certain countries, gaming platforms, and game genres (Krotoski, 2004). Therefore, research into gaming

may have overlooked genres and platforms where female players are more prevalent.

Psychological research into video games has reported conflicting views on how playing affects psychosocial development. The more negative consequences of video games have concerned those who argue playing violent video games increases aggressive behaviour (Anderson, et al. 2010), and those who argue that video games can be addictive (Griffiths & Meredith, 2009). On the contrary, studies looking at the benefits of video game play have explored the many ways in which the therapeutic and health effects of game play are manifested (Griffiths, 2005). For juvenile cancer patients, video game playing improved behavioural outcomes by increasing treatment adherence, self-efficacy and knowledge (Kato et al., 2008). Research has also shown that video game play is effective in physiotherapy and elevating mood, orienting the mind away from pain, and creating a more social environment (Griffiths, 2005). Recently, governments and businesses have begun to consider the efficacy of "serious" games as training and teaching tools (de Frietas & Jarvis, 2007), moving games from pure entertainment and toward a learning outcome. While there is great enthusiasm for the potential of games-based learning (Prensky, 2001), there has been limited empirical research in support of the efficacy of games as a classroom instructional tool when measured against the games' learning objectives (Galarneau, 2005). However, certain video games have been shown to improve cognitive skills. For instance, both boys and girls show improvement in visual memory, visual spatial ability, mental rotation ability, and faster processing speeds by practicing game play (Ferguson, Cruz, & Rueda, 2008; Terlecky & Newcombe, 2005).

Studies have linked video game playing in youth to later technology orientation for males in computer science majors (Barron, 2004; Margolis & Fisher, 2002). The assumption drawn is that gender gaps in game playing habits lead to gender gaps in overall computer literacy, IT skills, and general interest in IT applications (e.g., American Association of University Women, 2000). Carr (2005) adds that the "persistence and pervasiveness" of the myth that males are the natural audience for computer games shows the power of the construct of masculinity, which "proliferates around technological devices," resulting in the "side effect" of female marginalisation (p. 468). Focusing on female gaming preferences, Carr studied the gaming choices of teen-age girls in an after-school club and concluded that preference and taste in gaming content was rarely consistent and highly alterable, often merely

through exposure. Cassell and Jenkins (1998) assert that when the gender rift in technological inclination occurs, computer games and computers become "boys' toys" and girls are socialised away from computer usage, developing a general disinterest in technology (p. 14). Hayes (2008a) explored video game play as a route to increased IT knowledge for females, highlighting a major difference between the boys and girls in the study in that girls tended to engage with games ("casual-games") in ways that did not afford the "technology-related learning" that is crucial for an IT inclination (p. 189). Later, Hayes' (2008b) surveyed 1,113 school-age children and found that perceived proficiency with IT tools was significantly stronger for those children who had engaged in game-related content creation (creating fan fiction or art, 'modding', hacking, etc.). Furthermore, Hayes (2008b) cautioned that evidence regarding the connection between game-related content creation and IT skill improvement was anecdotal and it is not clear which game-related activities might be more appropriately linked to IT proficiency.

The perceptions regarding female gaming behaviour, cognitive skills, and technological inclination may vary, but women are decidedly the most active consumers and players of casual games. This qualitative study here focuses on women who play causal games frequently in an effort to understand how women perceive games and game-play in a context where the conventional gender stereotypes are undermined. If girls and women are indeed at a disadvantage when unfamiliar with video game-play, it is worthwhile to explore the motivations and experiences of women who are highly familiar with games within a category of gaming where women are recognised as the dominant group.

Yee (2006) examined the motivations for play in massively multiplayer online role-playing games (MMORPGs) and created an empirical model of gamer motivations. The study showed that males were motivated by achievement, whereas females were motivated by the more social factors within gaming. Similarly, Hussain and Griffiths (2009) in a qualitative study considered the attitudes, feelings, and experiences of MMORPG players, deriving themes around gaming behaviour and how gaming was incorporated into daily life. They found that players used MMORPGs to alleviate negative feelings and that the psychosocial impact of gaming had both positive aspects like facilitating social introductions and improving efficiency at using computers as well as negative aspects like neglecting personal relationships or commitments. Male participants are more strongly represented in the majority of the research. Many video game studies tend to focus on adolescent or student/university

populations, and there are also far fewer qualitative studies in the area of gender and video game play. Furthermore, while there have been publications addressing women in the games industry and the popularity of casual-games among female players (Krotoski, 2004), there are no published psychological studies that focus on adult, female casual-gamers.

Given the paucity of qualitative studies and studies in general that focus on the female gamer, some researchers have attempted to address this void by exploring the preferences of female gamers in general. In Hayes' (2007) study of two women who were non-gamers, the participants learned how to play a MMORPG and shared their feelings about the game, their likes and dislikes. The women engaged with the game in different ways and for different motivations. Haves concluded that gamer identity, rather than gender, was a more appropriate lens for understanding how both males and females approach gaming and develop personal gaming preferences. In another study considering gendered preferences in gaming, Hartmann and Klimmt (2006) looked at female "dislikes" in gaming to better understand how the content of games might steer women away from gaming. Based on a survey of 317 female respondents, the researchers found that the lack of meaningful social interaction and violent or sexually stereotyped content were the strongest reasons women disliked a video game. The researchers also conducted a second study looking at gender differences in competiveness in gaming. Of the 795 respondents to the online survey, only 18 were female, leading the researchers to emphasise the lack of female gamers.

Yates and Littleton (1999) suggest that when looking at gendered aspects of computer gaming, it is important to consider context and social construct because the activity "draws heavily upon the cultural position of the gamers themselves" (p. 106). Overall, studies tend to demonstrate a lack of diversity in gaming context and only a few have appropriate sample sizes of female players for gender comparison. The present study focused on female casual-gamers who play frequently (daily) and skilfully (i.e., high-scoring) in an effort to capture a gaming environment where women are the dominant players and that represents a broader of a gamer.

Method

Participants: All participants in the study were adult females. Of the 16 participants who began the study, four women withdrew while the study was underway. Participants who withdrew gave consent for any data submitted thus far to be used in the final report. The participants

ranged in age from 27 to 82 years, with a mean age of 52 years (SD = 13years). The majority of the participants identified as American (87%) with the remaining participants citing the Philippines, New Zealand, and Puerto Rico as their nationalities. All were high-school graduates, with a significant minority (47%) completing "some university" and the rest having a university degree (20%) or a Masters level degree (20%). All reported playing casual games daily or near daily, with an average daily game play of 5 hours (SD = 4 hours). Four participants reported playing upwards of nine hours each day, with one participant reporting an average of 14 hours daily. All the participants played video games, and most (87%) played games on casual-gaming sites such as BigFishGames, PopCap, Pogo, and Facebook. A slight majority of the women (53%) reported owning and playing console games (e.g. Thief, Civilzation) in addition to computer-based games, while the remaining participants (47%) did not play or own console games, relying solely on computerbased games. Finally, all identified their home as their preferred gaming environment, with just under a quarter (23%) mentioning a mobile device (iPod Touch, Palm Pilot, mobile phone, etc.).

Design, Materials and Procedure: Participants were recruited via postings made to several casual gaming website discussion forums (BigFishGames. com, iWin.com, Pogo.com, Gamezebo.com and emailed to members of PopCap.com and the casual games mailing list of the International Game Developers Association). These sites were chosen as the best sites for recruiting participants because they are the most popular among casual-gamers and are trusted destinations for casual game content (Juul, 2009). The study was self-selecting in that participant recruitment posts specifically asked for women who played daily or near daily, and who considered themselves to be "skilful, high-scorers, or competitive" in their game play. Participation in the study was voluntary, and no incentives were offered to participate. The study used multiple qualitative methods of data collection for a comprehensive understanding of participants' motivations and experiences. More specifically, the study comprised (i) an introductory e-interview, (ii) a four-week online-focus-group that included blogging (diary entries) and forum discussions, and (iii) an exit e-interview. All interviews and online focus group discussions were conducted over a six-week period. Individual introductory e-interviews were carried out (asynchronously) via email and follow-up questions sent as needed. Questions asked for basic demographic information (i.e., age, nationality, and education), types of games and platforms used, and an estimation of daily game play. Other questions explored personal experiences with computers, games and views on video game culture, technology, and the relevance of gender issues to such topics.

The online focus group lasted four weeks and commenced after introductory interviews were completed. The focus group was created and hosted on Ning.com and limited to invited participants. All content was private, so not discoverable by search engines like Google. Participants created profiles with avatars and were instructed to write diary entries (or blogs) daily. They were asked to reflect on game play, score, and motivation, and encouraged to focus on emotions when writing. The online structure of the focus group allowed for discussion in two ways: First, participants were able to read and comment on the blog/diary entries of others. Second, participants created and responded to discussion topics posted in the forum area. The researcher posted several topics concerning gaming, gender and technology from current literature, and participants started discussions on topics of their choosing. The exit e-interview was an online survey, hosted on SurveyMonkey.com, and no identifying information was collected. The desire for additional anonymity was to encourage candid feedback on the online format, the blogging experience, and group discussions.

The asynchronous nature of all interviews and discussions in the study allowed the participants to respond and participate at their leisure. Ethical issues around consent, privacy, anonymity, withdrawal from the study, and debriefing were handled effectively using email and by posting all relevant study information, and participant rights on the Ning.com site. Furthermore, since the content of the email interviews, diary/blog entries, and survey-based exit interviews were already in text format, no transcription was necessary. The data were analysed using an inductive approach to Thematic Analysis, a qualitative method that focuses on "repeated patterns of meaning" to draw out the most salient and prevalent themes across the data set (Braun & Clarke, 2006, p. 86). Given the multiple methods of data collection, Thematic Analysis was chosen for this study because of its flexibility in analytic and theoretical approaches. The analysis was conducted within a 'critical realism' framework in order to focus on the way participants made sense of their experiences (Braun & Clarke, 2006). Critical realism as a theoretical position lies within a contextualist method and endeavours to go beyond the semantic level of analysis to reach the latent level of "underlying ideas, assumptions, and conceptualizations" (p. 84). Following the analytic process (see Braun & Clarke, 2006), data were coded for semantic and latent content through a line-by-line analysis. Initial codes were then collated into a list of potential themes that were reduced by checking how they related to all coded extracts. Finally, themes were revised and defined until only a few succinct themes were able to account for the majority of coded extracts.

Since this qualitative study aimed to explore the participant's account of their experiences and motivations, it was vital to consider how the overall research topic of gender inequality in video game play and technology might have influenced the data. The present study employed a feminist research paradigm (Wilkinson, 1988) and the researchers intentionally asked questions about experience in gaming and experience with technology as a function of gender. In an effort to control for reflexivity bias, the data were divided into two groups: researcher-led topics from the interviews and discussion forum; and participant-led topics from the diaries and discussion forum. Also of note is that the participants were far more informed about game genres, gaming culture, and technical issues around gaming than the researchers, so similar to participatory research schemes (Park, 2001), the participants were experts and were able to introduce new topics of conversation to the study.

Results

The volume of content generated is summarized in Table 1. Each participant averaged ten diary entries over the four-week study. Participants were active in creating and responding to forum discussion topics, with "Console games?" and "Favourite game or daily goal?" garnering the most responses (14 and 13 respectively). For the interviews and other researcher-led data (n=16) from the discussion forum, four main themes were identified: (i) peripheral knowledge from gaming; (ii) gaming as a domestic life priority; (iii) gaming as a personal occupation, and (iv) gaming and technology as gendered

Table 1
Volume of content in 4-week online-focus group

Blog post/diary entry per participant	M = 10; SD = 6
Discussion post per participant	M = 9; $SD = 6$
Total blog posts/diary entries	123
Discussion topics started by researcher	5 (with 28 replies)
Discussion topics started by participants	13 (with 67 replies)

(n=12)

Peripheral knowledge from gaming: Participants dealt with many aspects of gaming that were tangential to actual game-play and that required additional knowledge or expertise. Table 2 offers extracts on how video game play was relevant to knowledge in technical and gaming-related areas. Approximately half (n=8) mentioned technical matters when discussing their gaming habit, making references to harmful viruses

from untrustworthy websites and countless software issues like version control, installations, and removal. Rather than positive or negative, the acquired knowledge influenced the ways in which the women dealt with or avoided technology issues as a means to an end in gaming. The peripheral technical knowledge culled from gaming experience guided future decisions in gaming and determined how trustworthy certain websites and products were deemed. In addition, the women sought out new knowledge and information in an effort to offset any technical issues that prevented their gaming (e.g., finding safer websites in Extract 1, and repairing computer hardware in Extract 2). Examples of gaming knowledge were also present in the data. Participants often listed, recommended and shared information on favourite games and gaming genres, going so far as to name sequel titles, fan communities, and dates of publication. More than merely listing information, participants (n=4) assumed an "expert" tone when sharing such information (see Extract 3 and Extract 4). Gaming knowledge was displayed across specific game franchises or within certain game genres. For some, like P10 in Extract 4, expert knowledge is evidenced by an ability to cross gaming genres with ease and an overall comfort with most game platforms.

> Table 2 Peripheral knowledge from gaming

Technical knowledge	n = 8
Extract 1: "I also read horror stories of other sites where a game seriously harmed the hard drive or other variants. Having dealt with sites that imbed and do all kinds of harm, or at least waste resources and time, it is important to me. I read many of the comments before I decided to try it out."	P13, age 55
Extract 2: "We had a really big fight once, which ended up with my computer on the floor in pieces. I just put it back together and amazingly, it worked fine (with less functionality)."	P3, age 39
Games knowledge	n = 4
Extract 3: "Thief, FPS, 1999, every day. It is the father of all modern stealth games. Thief: The Dark Project (1998), Thief: The Metal Age (2000) and Thief: Deadly Shadows (2004). Despite the dated graphics, there is an atmosphere and feeling in Thief that I have never found in another game. Also, there is an extensive fan community at www.ttlg.com where many people create their own maps. They have pushed the original technology to its limits. There are over 800 Fan Made Missions (FMs) currently, and new FMs are released every month. Thief 4 has finally been started, so there is something new to look forward to!"	P2, age 40
Extract 4: "I just started playing WOW [World of Warcraft] in December 2009, as research for a design project that I am working on. Prior to WOW, it depended on my mood I would switch to first person shooters, or more easy going/ score beating games like Katamari, or strategy games like Civilization (all in one day sometimes)."	P10, age 27

Gaming as a domestic life priority: The domestic context of gaming was a topic that frequently arose when the women discussed their gaming experiences. Table 3 includes extracts that reflect how gaming was a considerable and prioritised domestic activity. For many (n=9), gaming was an activity influenced by the relationship dynamic with other people in the home, whether partner, roommates, or children, and if the gaming was a shared or non-shared leisure pursuit (see Extract 5 and Extract 6). In some cases where partners were unsympathetic to game playing, participants (n=4) characterised gaming as a means of escape or something scheduled when home alone or done in defiance of the opinion (see Extract 7 and Extract 8). Not all priorities of domestic gaming were about finding time for solo play. Several (n=7) offered examples where gaming was instrumental in facilitating social behaviour (often with family or friends who lived at a distance) or where gaming was a shared interest that underscored efforts to be more social (see Extract 9 and Extract 10).

Table 3
Gaming as a domestic life priority

A shared or non-shared leisure pursuit	n=9
Extract 5: "I play less on the weekends because my husband is home; however, we sometimes play games together."	P2, age 40
Extract 6: "I am always being criticised by my partner for "wasting" my time. I try not to let her know that I am playing if possible."	P6, age 59
Unsympathetic partner	n=4
Extract 7: "I play as soon as my husband leaves for work and the kids leave for school. And yes, I'd play more if I could (like, if I wasn't married or if I didn't have kids or a household to manage)."	P3, age 39
Extract 8: "I play a couple of hours a day-sometimes more, but not regularly-really anytime except when my husband is home No one close to me other than my husband has ever commented on the gaming-which he finds to be "inane"-but I do play when he is immersed in endless sports."	P13, age 55
Facilitating social behaviour	n=7
Extract 9: "I have owned Wii Walk It Out for 3 weeks and have never even opened the package yet – but I plan to play it from a distance with my granddaughter age 8: I LOVE DDR [Dance Dance Revolution] and Guitar Hero, own it and rarely play on my own but will in groups."	P4, age 60
Extract 10: "There are some friends that I have become closer to through playing games. I never see them, they live in other states, so I only relate to them through games."	P6, age 59

Themes from researcher-led data (n=16)

Gaming as a personal occupation: Somewhat relevant to the prior theme, this theme focuses less on context and more on how the women expressed their personal desires and experiences. The relevant extracts in Table 4 emphasise the why and how of gaming as a personal choice.

Participants expressed satisfaction with their personal routine, guilt about wasting time for gaming, and described their approach to gaming (as competition or self-challenge). In terms of routine, the majority (n=11) characterised gaming as a conscious part of their daily life interspersed with other household or daily obligations. Extract 11 shows how time for gaming was either rigidly scheduled or reserved in the day, while Extract 12 shows how the day was structured to allow for episodes of gaming. Some women (n=9) wrote about how gaming for them satisfied an emotional need (to be happy, social, have alone time) or a desire to manage mood (see Extract 13).

Participants also described how their competitive desires or self-competitive (challenge oriented) needs drove game play. Not only is competition or challenge a reason for gaming but the majority (n=12) reported some element of competition (or lack there of) as a goal in game choice. Extract 14 and Extract 15 demonstrate how participants identified the games, genres or circumstances where competition or challenge was a crucial aspect. A minority (n=7) shared concerns about the perception of gaming as a waste of time and included comments like those in Extracts 16-17 regarding the "better" or "more productive" things to be done (or not) with that time. Although participants acknowledge and at times express a negative view of gaming behaviour as wasted time, their choice overrides any criticism and gaming persists as their personal occupation.

Table 4
Gaming as a personal occupation

A routine in daily life	n=11
Extract 11: "If we are not actively doing something together, I am at the computer gaming. The only days I don't spend playing games are when I have to go somewhere during the day (like doctor appt) I often do not get to bed until late because I'm playing a game."	P2, age 40
Extract 12: "I played games at night after work (with a cocktail) I also played at work on a long day before my night meetings while grabbing a bite at my desk."	P13, age 55
Satisfying an emotional need	n=9
Extract 13: "I know that sounds weird, but it is to me almost as relaxing as reading a book. I play everyday, and actually try to finish one game a week at least."	P5, age 44
For competition or self-challenge	n=12
Extract 14: "I keep scores/times in notebooksplay Solitaire on Pogo and we have our token total at the start, play for a limited amount of time, then see who wins."	P1, age 51
Extract 15: "I am competitive on Bejeweled Blitz and love to beat my friends (who all are on Facebook and love to beat me)."	P4, age 60
As a waste of time (or not)	n=7

Extract 16: "I think people think it is a waste of time, but I don't. I feel it allows me to shift my attention and then I can go back and write or solve a problem afterwards."	P11, age 56
Extract 17: "I think the general view of the "video culture" is that it is a waste of time and talent. I know I personally could be putting my time to better use."	P15. age 82

Themes from researcher-led data (n=16)

Gaming and technology as gendered: Participants expressed gender concerns when writing about gaming and technology experiences. The extracts in Table 5 characterise gaming within gendered stereotypes and convey participants' opinions on social attitudes toward technology and female versus male knowledge. All but one participant in the study (n=15, P6 did not complete the introductory interview) characterised themselves as "tech-savvy" and comfortable making technology purchases, especially around computers and mobile phones (see Extract 18 and Extract 19). The perception of the tech-savvy ideal as gendered "geeky guys" by P2 in Extract 19 was echoed by others (n=13) and flowed pervasively in responses to questions on technology and "gamer" identity. For example, Extract 20 and Extract 21 demonstrate how participants identified as being inside or outside of game culture. While there are negative aspects to how "gamers" are characterised, some (n=7) raised the issue of viewing the knowledge divide in gaming and technology along demarcations of age rather than gender (see Extract 22 and Extract 23). Relevant to gendering concerns were recurring comments by some (n=8) that characterised the feminine identity as somehow more vulnerable or susceptible to negative repercussions in gaming and technical environments. Extracts 24 and 25 show how participants took on non-female identities to avoid negativity.

Table 5
Gaming and technology as gendered

"Tech-savvy" and technology comfort	n=15
Extract 18: "As far as "technology" is concerned, I am afraid my knowledge stops at the computer and my cell phone. I think men seem to like gadgets more than women but I think women are equally knowledgeable about them."	P15, age 82
Extract 19: "I am fairly knowledgeable and very comfortable with tech purchases I think some women know a lot about tech, but I think that a lot of women are intimidated by it Women are certainly capable of being computer techs. I think that the image of a gaggle of geeky guys conversing in <i>leet</i> keeps many women from even trying to learn."	P2, age 40
Gamer identity as masculine	n-13
Extract 20: "Never really thought of myself as part of the gaming world because the games I play are on my own and not part of a multi-player game. I don't think gamers have a specific personality type but the stereotype would be a skinny and pimply young man with few social skills and poor hygiene and lives on the computer days at a time."	P8, age 47

Extract 21: "In the video lounge where war-themed RPG games and shooter games still thrive it is a "boys" world."	P4, age 60
Age versus gender	n=7
Extract 22: "I think age is more of a factor than gender Younger people grew up with all kinds of electronic gadgets and take new ones in stride, sometimes to excess I believe. Many of the older generations don't see any need for so many gadgets. I'm probably somewhat in the middle."	P12, age 60
Extract 23: "You know, I'm not sure that this is so much a gender issue as an age issue. I think younger women are much more likely to be as comfortable with technology as their male counterparts. Older women, not so much. If you grew up in the 50s, you kind of got hammered about "girl things" and "boy things". I think a lot of women my age are reluctant to get into technology because they think it is not "feminine."	P14, age 62
Female identity as vulnerable	n=8
Extract 24: "9 times out of 10, when I pick a character, I will pick a male Men have fewer social restrictions placed on them I've often resented that I was born a girl, so I guess it's natural that I'd want to play a guy when I had the chance."	P2, age 40
Extract 25: "I feel that flirting or a different type of interest occurs when gender is discovered from personal experience as well as from reading open chat that occurs in WOW [World of Warcraft]. I am especially competitive when guys act like I can't play as good as them because I am a woman."	P10, age 27

Themes from researcher-led data (n=16)

Within the blog/diary content and other participant-led data (n=12), two main themes were identified: (i) Personalisation in game choice ("As I like It"), and (ii) Emotional reality in game choice ("How I feel about It"). Each theme has sub-themes similar to the themes found in the researcher-led interview data. However, the analytic emphasis in the participant-led data was on understanding game choice and why the participants chose to play or not play, purchase or not purchase, immerse or not immerse into a game.

Personalisation in game choice ("As I like It"): The participants wanted to control and customise as many aspects of their gaming experience as possible. When such unique personal preferences are met for each woman, it triggers her decision-making on when, how, where and why to game. The extracts in Table 6 relate to the following three sub-themes: 1) overcoming constraints, 2) customizing play, and 3) routine preferences. The sub-themes have much interconnectivity and all were factors in determining game choice.

Overcoming constraints: The theme Peripheral knowledge from gaming in the researcher-led data addressed how participants culled technical and gaming knowledge in the pursuit of the pastime. The current focus is how participants overcame the constraints to gaming and how issues were handled or avoided to continue gaming. Many (n=8) lamented technical

issues as a barrier or nuisance and were clear in how they dealt with (see Extract 26) or would prefer it (see Extract 27). By-products of dealing with technical constraints were issues of reliability and accountability in the game development industry. As expressed in Extract 28, some participants (n=5) voiced concerns regarding trustworthiness and quality control and admonished developers and/or distributors for errors or poor customer service. The majority (n=10) also shared concerns about more practical constraints of gaming such as prices and the costs associated with gaming. Overall, cost concerns were not entirely based on the game's actual price, but more so on how the price was relevant to the perceived "worth" of the game or gaming related item and the "value" it held for the participant (see Extract 29).

Customizing play: Participants customised game play according to personal preferences. For some (n=6), changing style of play to make the game more challenging or competitive meant creating new rules of play. For example, P1 in Extract 30 configures the challenge of the game to enhance the game's competitive aspects. For others (n=6), style of play was relevant to the social aspects of gaming and personal preferences on who to include or exclude from play (see Extract 31). There were also preferences in the structural characteristics or content of the game. Many participants (n=8) focused on content attributes when writing of motivation to play, underscoring the importance of such characteristics in their enjoyment of (or annoyance with) the game (see Extract 32).

Routine preferences: Participants prioritised gaming in their daily routine and around their domestic responsibilities. While similar to *Gaming as a domestic life priority* from the researcher-led data, here the preferences in routine reflect how participants felt about the gaming habit and how such feelings would influence game choice. All participants (n=12) described a preference in daily gaming routine, often commenting on the emotional meaning of the routine (see Extract 33), when the routine is interrupted, and the efforts they must take to readjust. Such patterns of play are unique for each participant and may simply follow a personal preference of which game to play first, next and last or the genre of game that is more appropriate for the morning versus the afternoon.

There was also the consistent mention of "guilt" by a majority (n=9) when referring to the preference to play games over doing other activities in their routine (see Extract 34 and Extract 35). A few (n=3) defy the feelings of guilt, as seen in Extract 36 and Extract 37, and focus on allowing for such personal indulgence, at times emphasising the perceived benefits of or necessity for the gaming pastime.

Andrea Lewis & Mark D. Griffiths

Personalisation in game choice ("As I like It")	
Overcoming constraints: Technical	n=8
Extract 26: "I did get frustrated with FB [Facebook] and Farmville today and just quitthe game kept freezing on me."	P5, age 44
Extract 27: "the fact that it has to reopen when you close a game and that it is so darn slow about it - a lot of times when closing stuff down I have NO patience - when I click the X I want it done!"	P1, age 51
Overcoming constraints: Trust and game developers	n=5
Extract 28: "The game is developing so many glitches that the bleeping dev team wont fix, and individual glitches that support comes up with lame fixes for The support idijits [sic] today told me to turn off my AV [anti-virus] when I play! yeah, righti love having more viruses and Trojans."	P7, age 50
Overcoming constraints: Cost, value, and worth	n=10
Extract 29: "I was rather disappointed because the first one I played lasted for hours over days, but I finished this one in just a few hours - it hardly seemed worth the money."	P8, age 47
Customizing play: Challenge	n=6
Extract 30: "I decided that to make the game harder, I cannot switch play style and I also don't turn the board during the regular gameplay - only at the end of the level when you have to in order for the key to follow the path. Thus, it can take several days of playing to finish one level."	P1, age 53
Customizing play: Style	n=6
Extract 31: "I prefer playing privately, in my little nook on the PC, or the tiny iPhone screen that nobody else but me can see. :) Maybe I find it upsets my concentration and I can't get good scores if people are watching?"	P3, age 39
Customizing play: Structural characteristics	n=8
Extract 32: "Felt let down and disappointed that this game wasn't it. Very average graphics, story line was just ok and the game play wasn't greatly logical. Lots I didn't like about it so I only played 15 minutes."	P8, age 47
Routine preferences	n=12
Extract 33: "Everyday I play at least one of the following, a Match 3, a TM [time management game], or a solitaire - one of these three will satisfy my competitive nature - then as things settle down I will play a hidden object of some sort."	P1, age 51
Routine preferences: Guilt	n=9
Extract 34: "I wish there was a way we could make a living by playing games—then we wouldn't have to feel guilty about enjoying it so much!"	P6, age 59
Extract 35: "There are times that I do feel guilty. I know I should be doing something else but, there I sit playing games."	P5, age 44
Routine preferences: Defying Guilt	n=5
Extract 36: "During my free time, all I wanna do is play games! There is a little amount of guilt that creeps in, but I just squash it down like a bug."	P3, age 39
Extract 37: "If you need to play, as in it's a way to manage stress, *don't* feel guilty. You *are* being productive"	P7, age 50

Themes from participant-led data (n=12)

Emotional reality in game choice ("How I feel about it"): Emotions, feelings, and the "reality" of the experience (whether in-game or in

real life) were crucial motivating factors in determining game choice. As a result, the term reality is more of an emotional reality, based on how the individual participant felt, and not necessarily on the actual circumstances of some in-game or out-game reality. There are three distinct sub-themes subsumed under this heading: game choices 1) for mood modification; 2) driven by in-game emotion; and 3) driven by out-game reality. Almost all participants were strongly represented within all three sub-themes and relevant extracts are found in Table 7. Only one participant, P12 in Extract 38, was reluctant to attribute any changes in her emotional state to her gaming habit.

Mood modification: Participants (n=11) offered reasons for why they were emotional or felt emotional when playing a game or choosing to play a particular game. Game playing was done to change mood or to help free the participant from a mood or emotion that was unhelpful or unwanted. In Extract 39, P1 expresses desire for a specific genre of game because of how it alters her state of mind, while in Extract 40, P6 focuses on the act of playing in general as a means of coping with mood.

In-game emotion: This sub-theme captures how the women made emotional attachments within the game or with the game genre. Participants (n=11) expressed feelings of nostalgia about games and genres while others were highly emotionally invested in the game. For example, P2 in Extract 41 wrote of her connection to a particular game genre and described the colourful feelings derived from game-play. In addition, preference for a particular character or a game drove some participants (n=8) to seek out that game or genre. Preference included emotion for a particular game character as shown in Extract 42, or for an avatar as shown in Extract 44. The near poignant description of devotion and love in Extract 43 demonstrates how such emotional connections to game characters can lead to strong game choice preferences. Other participants (n=5) blended linguistic terms when describing real-world reality and in-game reality, often mentioning "worlds" and gaming as a means of escape. Extract 45 reveals the blurring of motivations and emotion between "worlds" as descriptions move from the in-game experience to the reality of the experience.

Out-game reality: Gaming was characterised by most (n=11) as escape from issues such as mood or physical ailments. Similar to Extract 45 that blurs the lines between in-game emotions and the reality of circumstances, this theme captures elements where that blurring was blatant and the goal of the participant was to create dissociation or an emotional change in their real world environment through gaming. Consequently, game-related

actions had strong emotional effect on out-game realities (see Extract 46), and emotion determined motivation to continue gaming. Likewise, for P6 in Extract 47, although games were negatively characterized as a means of escape from reality, it was an acknowledged and desired escape and gaming activity continued.

Table 7
Emotional reality in game choice ("How I feel about it")

Emotional reality in game choice (How I leef about it)	
No emotion attributed to game choice	n=1
Extract 38: "There aren't really any emotions involved other than I am happy and relaxed most of the time but I don't know how much that is due to playing games."	P12, age 60
Mood modification	n=11
Extract 39: "I didn't sleep well this morning, and I find TMs [time management games] very focusing - I like them for that reason - it is not really something you have to look for, you just focus all your energy on getting the tasks done and then go - I find it relaxing to have to be so singular."	P1, age 51
Extract 40: "Playing makes me feel less depressed as well. Of course when you are playing and really involved in the game, you really are not thinking about anything else. It is like meditation for me in a way."	P6, age 59
In-game emotion	n=11
Extract 41: "I tend to choose the fantasy themes, as it makes me feel like I'm in another world. I don't like the gritty ones set in the city, like the crime or detective ones. Instead I love stepping into fairy tale worlds (even the dark twisted ones) I feel young again, and light, and carefree."	P3, age 39
In-game emotion: For avatars/characters	n=8
Extract 42: "Surprisingly, I find that I have favourites among the tribe people, like Sharla. I maxed her out on skills & attributes. I'm not sure why I like her, but she is the first person I look for when I come back."	P2, age 40
Extract 43: "Both of these are of my veno, FoxRunning. I love her, and her pets so much This picture is of my beloved Phoenix. She is what is called a Kowlin, the fastest pet in the game, and the most beautiful"	P7, age 50
Extract 44: "I was in dire need of a full day of game play and I felt like I owed it to my Avatar because I have neglected her for the week"	P10, age 27
In-game emotion: Blurred reality and "worlds"	n=5
Extract 45: "I know, I knowplease don't say 'it's just a game'. Try being disabled to the point you haven't been able to leave the house in almost three years, and even walking around the house on forearm crutches is hazardous"	P7, age 40
Out-game reality	n=11
Extract 46: [after deleting Facebook account to curb gaming on the site] "What bothered me, almost saddened me was that not one of my "real" friends said anything. Now mind you one of my Garden Life friends was sad to see me leave. I believe she will miss the gifts, not me to be honest."	P5, age 44
Extract 47: "My therapist wants me not to play games She thinks that I am avoiding feeling things that I need to stop avoiding feeling. It is true that when I have a free minute, I jump into a game. I think it's because it's fun and exciting, she thinks I need to stop avoiding. I really cant stop, but I will try to focus on my feelings."	P6, age 59

Discussion

The analysis of the researcher-led data suggests that female-casual gamers are knowledgeable and serious about gaming and, by extension, technology. Additionally, this prioritization and personal occupation with gaming supersedes negative stereotypes, even when confronted with gendered experiences or social views.

Peripheral knowledge from gaming: In pursuit of gaming as an activity, participants demonstrated technical knowledge from their experiences dealing with the peripheral issues of computer gaming. They also showed gaming knowledge from their progression as gaming enthusiasts. These findings suggest a learning potential when dealing with issues that are tangentially related to gaming (i.e., computers, technology, games culture) and support the findings of Hayes (2008b) who found a connection between IT proficiency and engagement with game-related content. While the present study did not explore the depth of such knowledge for each participant, half of the participants conveyed experiences in gaming as requiring some technical knowledge. Follow-up studies could explore depth of knowledge, the nature of experiences, and perceptions of technical efficacy.

Gaming as a domestic life priority: Video game playing was a domestic priority for participants, but each woman played for entirely individual reasons and under varying circumstances. Some shared reasons appeared to be escape and avoidance, managing social facilitation, or simple indulgence in a preferred pastime. These finding are consistent with previous literature that found gamers played for competition and achievement, for immersion/escape, or from a desire to be more or less socially active (Yee, 2006; Hussain & Griffiths, 2009). Researchers have found that females prefer games with meaningful social interaction (Hartmann & Klimmt, 2006). The findings in this study suggest that socializing (or not) through gaming may be driven by psychosocial needs like managing a relationship (playing with someone in the home or a distant acquaintance) rather than any general desire to be social. Relationship dynamics are often affected by gaming and past research supports the finding that game play can augment real-world relationships or result in social avoidance (Hussain & Griffiths, 2009; Cole & Griffiths, 2007). The priority to game in a domestic context suggests a dynamic between domestic life and gaming habits whereby domestic circumstances may dictate gaming experience. In setting gaming as a priority, objections from partners are dismissed, gaming routines altered, or gaming is used as an effort to 'bond' with others in

the home. Therefore, by focusing on the social and cultural contexts of gaming (Yates & Littleton, 1999) in addition to domestic environments for gaming (Bryce & Rutter, 2003), the female gamer can be included when exploring video game demographics and incidence of play. Additional research exploring the context of gaming for female players may provide insight into how contextual circumstances enhance or inhibit gaming behaviour and interest.

Gaming as a personal occupation: Gaming was a serious habit for and participants revealed strong and determined attitudes about gaming and the satisfaction gaming afforded. Prior studies have shown that competition or self-challenge is a strong motivator in game playing (Yee, 2006). While some researchers have emphasized how female gamers avoid competitive video games and prefer self-challenge (Hartmann & Klimmt, 2006; Lucas & Sherry, 2004; Wood et al., 2004; Bryce & Rutter, 2003), the current findings suggest that regardless of playing versus the self or others, the occupation of gaming satisfied a competitive drive for many participants. Therefore, female gamers may characterize competitive satisfaction in video game play in many different ways. Although participants enjoyed their gaming, some shared concerns that gaming was wasted time. Similar to studies that have found gamers often refer to playing as "a waste of time" (Wood, Griffiths, & Parke, 2007), the findings here support the notion that such views of gaming may be a reflection of societal views regarding the value of video game play. Such negative views of gaming may inhibit or limit immersion into game culture for female gamers.

Gaming and technology as gendered: Participants' experiences with technology and game culture were gendered; however, such experiences do not necessarily affect their interest in or affinity to technology and games. The majority identified as "tech-savvy" and comfortable making technology decisions, regardless of assumptions on male versus female knowledge. Some also wrote of the vulnerability of female identity when in gaming or technology cultures. These findings imply that female casual-gamers are acutely aware of their minority representation in the gaming and technology worlds, but such stereotypes may not diminish their interest. Carr (2005) wrote of the construct of masculinity that influences the female's sense of belonging in traditionally masculine cultures like video games and technology. The theory is supported by the many participants who characterized gaming as masculine and the gamer identity as masculine. This finding raises questions on how female gamers find parity with their interest in gaming and their purported underrepresentation in the games industry. Since all players in the study were avid gamers, it would be interesting to compare how female gamers regard such gendered stereotypes in gaming and technology in contrast to non-gamers. The analysis of the participant-led data suggests that female-casual gamers are motivated to play in highly customized gaming environments. They also have strong emotional investments in games that stem from in-game and real-world motivations.

Personalisation in game choice ("As I like It"): Personal preferences and customization were pervasive and crucial factors in game choice for some participants who overcame technical constraints to accommodate their preferences. Once again, dealing with technical constraints implies an ability to develop technical knowledge, even if merely from learning how to overcome them to resume gaming. However, similar to the conclusions of Hayes (2008b), making any connection between gaming activity and technical skills is unwise without clear empirical evidence linking specific activity to technical skills or knowledge. Future studies exploring which technical activities are tied to certain gaming preferences could lead to a better understanding of how to match gaming habits with depth or breadth of technical knowledge. Constraints regarding the cost of games were also important to a majority and meant the women had concepts of "value" and "worth" that were not necessarily dependent on the price of the game, but instead were highly subjective and based on the level of satisfaction the game afforded. Some raised issues of "trust" with the game development industry that were often tied to the technical and cost constraints mentioned. Therefore, evaluations of game developers and future purchases were based on experience and the fulfilment of subjective preferences. These findings, if corroborated by further research, imply that the female gamer is a scrupulous and discerning buyer, a potentially loyal customer when there is trust, but also incredibly critical when there is no trust. Wood et al. (2004) found that brand assurance was an important factor to gamers of both genders, therefore, studies looking at female gaming preferences could focus on issues of trust with game developers and brands when exploring why females may be disproportionately represented in certain game genres, platforms, etc.

Several participants customised the rules of game play to enhance challenge or competitiveness, or adjusted their playing style to meet their standards of quality (e.g., P8 in Extract 32 reduced her play time when game quality was deemed poor). Indeed, as Hayes (2007) found in case studies, female gamers engage with games for individual reasons and in unique ways. The current findings imply that the ability to be inventive, re-design and customize the gaming experience may be a crucial aspect

of why a particular game is chosen or is preferred. These findings support those of Wood et al., (2004) who found certain structural characteristic were important to gamers and that some of these preferences, like the game's style of graphics, humorous content, and scoring function, were significantly more important to females. All participants had preferred play routines (genres, physical setting, time of day for gaming, etc.) and sought out games that would satisfy the criterion. A surprising finding was the mention of "guilt" by the majority when acknowledging preference for playing games. This finding was consistent with those of Wood, Griffiths, and Parke (2007) where over a third of their participants shared similar feelings. Guilt has been characterized as a "self-conscious" emotion (because it is the self evaluating the self) and "moral" emotion (because it implies judgement) that can alter behaviour (Tangney & Dearing, 2002). As video games continue to grow in popularity, future research might explore how societal views of video game play coupled with negative perceptions of female representation in gaming might influence female gamer self- consciousness.

Emotional reality in game choice ("How I feel about It"): Emotional reality appeared to be a powerful gauge of game choice for participants. The "reality" or realness of a gaming related experience was based more on feelings and emotions about the experience rather than on any true reality of the circumstances (e.g. when P7 in Extract 45 says "please don't say it's just a game"). For nearly all participants in the diary portion of the study, gaming was used to modify mood, alter emotion, or manage state of mind. P6 in Extract 40 describes gaming as "meditation" while P1 in Extract 39 writes of the "focusing" aspect of a specific game genre. Both are examples of how moods are managed or avoided using the immersive aspects of game play, and how the desire for mood modification drives game choice. These findings support those of Hussain and Griffiths (2008) who found that 41% of the gamers played online for escape while 34% played to alter mood. While the present study did not explore overuse, game play for mood modification has also been linked to excessive and addictive gaming behaviour (Griffiths, 2008). However, researchers have argued that the context of the game play must be taken into consideration when looking for pathological evidence of dependence rather than merely the amount of time spent playing (Griffiths, 2010). Given the current finding, studies on gaming for mood modification could include more moderate instances of play and a wider variety of online gaming platforms (e.g., casual gaming and social networking websites). Likewise, studies on excessive and addictive gaming should focus on female gamer populations as much as male populations when exploring gaming pathology.

The majority of participants were motivated to play a certain game because of an emotional connection to the game's content, i.e., the genre, character, or avatar. This finding implies that an emotional satisfaction was crucial to game play motivation, and it was related to elements of the game that were beyond functionality. This finding is in line with studies showing how important content and related structural characteristics are to female gamers (Wood et al., 2004), but the emotional satisfaction implies a more meaningful relationship than mere preference for certain details. Some participants expressed colourful and deep emotions when describing favourite characters and avatars. Such emotional connections influence gaming behaviour and its presence could predict game engagement. In-game emotions also seemed to blur realities for some who mentioned negotiating multiple "worlds" and finding escape in the in-game emotion. This phenomenon coupled with the emotion shown for characters and avatars, which are ostensibly representations of the self, fuel discussions on role-play, virtual identity, offline versus online existences, and how gamers can manipulate presentations of the self in gaming environments (Turkle, 1999). The findings of the present study imply that virtual existences are quite profound experiences for female gamers and may be tied to their motivation to play certain video games. Researchers are just beginning to examine how MMORPG players explore identity and gender through avatars and characters and have found that there is a great deal of emotional investment and attachment (Meredith, Griffiths, & Whitty, 2008). Studies hoping to reflect female gamer attitudes could include casual-games with role-playing or virtualworld aspects afford identity exploration.

Lastly, participants' motivation to play was influenced by the effect of in-game experiences on their out-game reality. Similar to findings from studies on mood modification (Hussain & Griffiths, 2009), game play could have a positive effect whereby play is done to feel better or distract the mind from discomfort. Conversely, it could resemble the experience of P5 in Extract 46 where in-game actions (leaving an online game community) created negative out-game emotions (feeling sad, ignored, and isolated). Therefore, their emotional or even physiological needs could be met by playing a game and games were sought out or avoided accordingly. This finding is corroborated by research showing the therapeutic and physiological benefits of video game play (Kato et al., 2008; Griffiths, 2005).

The present study was a qualitative exploration of prominent themes underlying the experiences and motivations of female casual-gamers and results provide grounds for future research on female gamers from a

positively gendered perspective. While participants were well represented in terms of age, the majority (87%) were American and so findings may reflect a cultural bias. Some of the women also played console games and other online games (e.g., World of Warcraft). In these cases, it may be somewhat of a misnomer to label them purely as 'casual' gamers. There are also limitations associated with data collection because the online diary and focus group are new methods and may not have been ideal formats for sharing and discussion. Indeed, two participants left the study early on citing an inability to use the 'blogging' tool. In addition, a few mentioned experiencing some difficulty in self-expression with the online blog format at the exit interview. While these considerations will require adjustments to the method if used in the future, overall participants shared a positive view of the format and made comments that implied the online and anonymous nature allowed for greater convenience and self-disclosure (Tidwell & Walther, 2002). The subsequent analysis of the data may have also influenced findings as there was no second coder to verify the reliability of the coded extracts and themes. In addition, interview questions regarding gendered experiences with technology and gaming created a potential for reflexivity bias and it is important to consider how themes may have been reported from the analysis had there been no questions regarding gender and technology.

Similarly, the perspective the research adopted is subject to criticism. While video game playing and technical affinity may be positive for some, the intent of the present study is not to characterize such interests as superior to others or necessarily beneficial for females. Rather, the goal is to create a new perspective that does not exclude a particular gender from such interests. Findings from the study may help to illuminate conversations around women as gamers, their gaming experience and habits, their game play motivation and choice, and any potential connection to technological affinity. Overall, the current findings as well as limitations bring forth the potential for further research on female gamers. The study revealed a profile of an enthusiastic and motivated female gamer who makes affordances to include gaming as an activity in her life. Moreover, it indicates a need to reconsider demographic perceptions of female gamers and why casual games are often relegated in gaming culture (although as mentioned in the limitations above, not all participants could be strictly defined as casual gamers). Future research can start to ask the right sorts of questions when considering female gamers and approach gamer recruitment without negative assumptions on prevalence. In addition, casual games are credible gaming environments and should be considered as much as a worthy area of research as more "hard-core" games.

REFERENCES

American Association of University Women (AAUW). (2002). *Techsavvy: Educating girls in the new computer age*. Washington, DC: AAUW Educational Foundation Commission on Technology, Gender, and Teacher Education.

Anderson, C. A., Shibuya, A., Ihori, N., Swing, E. L., Bushman, B. J., Sakamoto, A., & Saleem, M. (2010). Violent video game effects on aggression, empathy, and prosocial behavior in Eastern and Western countries. *Psychological Bulletin*, *136*, 151-173.

Barron, B. (2004). Learning ecologies for technological fluency: Gender and experience differences. *Journal of Educational Computing Research*, *31*, 1-36.

Blumberg, F. C., & Sokol, L. M. (2004). Boys' and girls' use of cognitive strategy when learning to play video games. *Journal of General Psychology,* 131, 151–158.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77-101.

Bryce, J. & Rutter, J. (2003). Gender dynamics and the social and spatial organization of computer gaming. *Leisure Studies*, *22*, 1–15.

Bryce, J., & Rutter, J. (2002). Killing like a girl: Gendered gaming and girl gamers' visibility. In Frans Mayra (Ed.), Computer Games and Digital Cultures-Conference Proceedings (pp. 243-255). Tampere, Finland: University of Tampere Press.

Carr, D. (2005). Contexts, gaming pleasures and gendered preferences. *Simulation and Gaming*, *36*(4), 464-482.

Cassell, J & Jenkins, H. (1998). *From Barbie to Mortal Kombat: Gender and computer games*. Cambridge, MA: MIT Press.

Casual Games Association. (2007). Casual Games Market Report 2007. Available at: http://www.casualconnect.org/newscontent/11-2007/casualgamesmarketreport2007.html Last accessed on 1 November 2009.

Cole, H. & Griffiths, M.D. (2007). Social interactions in massively multiplayer online role-playing gamers. *CyberPsychology & Behavior. 10*, 575-583.

Companion, M., & Sambrook, R. (2008). The influence of sex on character attribute preferences. *CyberPsychology & Behavior, 11*, 673-674.

de Freitas, S. & Jarvis, S. (2007). Serious games - engaging training solutions: a research and development project for supporting training needs. *British Journal of Educational Technology* 38(3), 523-525.

Entertainment Software Association. (2008). Industry Facts. Available at: http://www.theesa.com/facts/index.asp (Last accessed November 7, 2009).

Ferguson, C. J., Cruz, A., & Rueda, S. (2008). Gender, video game playing habits and visual memory tasks. *Sex Roles*, *58*, 279–286.

Galarneau, L. (2005, June). Authentic learning experiences through play: Games, simulations and the construction of knowledge. Presented at Digital Games Research Association's (DiGRA) Changing Views - Worlds in Play. Available at: http://tinyurl.com/24m49r6 (Last accessed July 6, 2010).

Griffiths, M.D. (2005). Video games and health. *British Medical Journal*, 331, 122–123.

Griffiths, M.D. (2010). The role of context in online gaming excess and addiction: Some case study evidence. *International Journal of Mental Health and Addiction*, *8*, 119-125.

Griffiths, M.D., Davies, M., & Chappell, D. (2004). Demographic factors and playing variables in online computer gaming. *CyberPsychology & Behavior*, 7, 479-487.

Griffiths, M.D. & Meredith, A. (2009). Videogame addiction and treatment. *Journal of Contemporary Psychotherapy*, 39(4), 47-53.

Hartmann, T., & Klimmt, C. (2006). Gender and computer games: Exploring females' dislikes. *Journal of Computer-Mediated Communication*, *11*, 910-931.

Hayes, E. (2007). Gendered identities at play. Case studies of two women playing Morrowind. *Games and Culture*, *2*, 23-48.

Hayes, E. (2008a). *Girls, gaming, and trajectories of technological expertise*. In Y. Kafai, C. Heeter, J. Denner, & J. Sun (Eds.), *Beyond Barbie and Mortal Kombat: New perspectives on gender and gaming*. Cambridge, MA: MIT Press.

Hayes, E. (2008b). Game content creation and IT proficiency: An exploratory study. *Computers & Education, 51*(1), 97 - 108.

Hussain, Z., & Griffiths, M.D. (2008). Gender swapping and socialization in cyberspace: An exploratory study. *CyberPsychology & Behavior, 11,* 47–53.

Hussain, Z., & Griffiths, M.D. (2009). The attitudes, feelings, and experiences of online gamers: A qualitative analysis. *CyberPsychology & Behavior*, 12, 747-753.

Juul, J. (2009). A casual revolution. Reinventing video games and their players. Cambridge, MA: The MIT Press.

Kato, P. M., Cole, S. W., Bradlyn, A. S., & Pollock, B. (2008). A video game improves behavioral outcomes in adolescents and young adults with cancer: A randomized trial. *Pediatrics, 122*, e305–e317.

Krotoski, A. (2004). *Chicks and joysticks: An exploration of women and gaming.* London: Entertainment & Leisure Software Publishers Association.

Lucas, K., & Sherry, J. L. (2004). Sex differences in video game play: A communication-based explanation. *Communication Research*, *31*, 499-523.

Margolis, J. & Fisher, A. (2001). *Unlocking the Clubhouse: Women in computing*. Cambridge, MA: MIT Press.

Meredith, A., Griffiths, M., & Whitty, M. (2008). Identity in massively multiplayer online games: A qualitative pilot study. In *Proceedings of the 10th international Conference on information integration and Web-Based Applications & Services* (Linz, Austria, November 24 - 26, 2008). G. Kotsis, D. Taniar, E. Pardede, and I. Khalil, Eds. iiWAS '08. ACM, New York, NY, 543-546.

Ogletree, S. M., & Drake, R. (2007). College students' video game participation and perceptions: Gender differences and implications. *Sex Roles*, *56*, 537-545.

Park, P. (2001). Knowledge and participatory research. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 81–90). London: Sage Publications.

Phillips, C. A., Rolls, S., Rouse, A., & Griffiths, M. (1995). Home video game playing in schoolchildren: A study of incidence and patterns of play. *Journal of Adolescence, 18,* 687-691.

Prensky, M. (Ed.). (2001). *Digital game-based learning*. New York, NY: McGraw Hill.

Selwyn, N. (2007). Hi-tech = guy-tech? An exploration of undergraduate students' perceptions of information and communication technologies. *Sex Roles*, *56*, 525-536.

Sweedyk, E., & Laet, M. D. (2005). Women, games, and women's games. *Phi Kappa Phi,* 85(2), 25-28.

Tangney, J. P. & Dearing, R. L. (2002). Shame and quilt. New York: Guilford.

Terlecky, M.S., & Newcombe, N. S. (2005). How important is the digital divide? The relation of computer and videogame usage to gender differences in mental rotation ability. *Sex Roles*, *53*, 433-441.

Tidwell, L. C., & Walther, J. B. (2002). Computer-mediated communication effects on disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time. *Human Communication Research*, *28*, 317–348.

Turkle, S. (1999). Cyberspace and identity. *Contemporary Sociology, 28*, 643 - 648.

Wilkinson, S. (1988). The role of reflexivity in feminist psychology. *Women's Studies International Forum, 11,* 493–502.

Williams, D., Yee, N., & Caplan, S. (2008). Who plays, how much, and why? A behavioral player census of virtual world. *Journal of Computer-Mediated Communication*, 13, 993-1018.

Wood, R.T.A., Griffiths, M.D., & Eatough, V. (2004). Online data collection from videogame players: Methodological issues. *CyberPsychology & Behavior*, 7, 511-518.

Wood, R. T. A., Griffiths, M. D., & Parke, A. (2007). Experiences of time loss among videogame players: An empirical study. *CyberPsychology & Behavior*, 10, 38–44.

Yates, S. J. & Littleton, K. (1999). Understanding computer game culture: A situated approach. Information, *Communication & Society*, *2*, 566-583.

Yee, N. (2006). Motivations of play in online games. CyberPsychology & Behavior, 9, 772–775.

Young, G., & Whitty, M T. (2010). Should gamespace be a taboo-free zone? Moral and psychological implications for single-player video games. *Theory & Psychology.*

Resum

Representació de gènere: un estudi qualitatiu d'experiències i motivació de jugadores de videojoc

Cada vegada hi ha més dones que juguen amb videojocs. Tanmateix, la literatura empírica ens ha mostrat consistentment que els homes juguen a videojocs amb més frequència que les dones, que els homes hi juguen més estona, i que tots dos gèneres presenten la mateixa tendència a considerar el joc com a un interès masculí. En consegüència, es va dur a terme un estudi per examinar els temes principals en les experiències i les motivacions de dones que juguen amb freqüència a videojocs "casuals". Les participants van ser 16 dones adultes, jugadores casuals, que van contestar dues entrevistes d'autoinformació en línea (al principi i al final de l'estudi) i que van participar en un diari/bloc en línea i fòrum de discussió durant un període de quatre setmanes. Les dades es van analitzar per als temes principals tot utilitzant l'Anàlisi Temàtica. Els resultats mostren àrees que eren importants per a les jugadores casuals, incloent-hi el coneixement perifèric dels jocs, compromisos domèstics i prioritats personals influïdes pel joc, i la inversió social, econòmica i emocional dels jocs. En explorar els temes prominents subjacents a les motivacions de les dones per jugar a jocs casuals, els resultats van apuntar a possibles noves línies de recerca sobre dones jugadores des de perspectives de gènere positives.

Paraules clau: videojocs, gènere, anàlisi temàtica

Resumen

Representación de género: un estudio cualitativo de experiencias y motivación de jugadoras de videojuegos

El número de mujeres que juega a videojuegos aumenta cada día más. Sin embargo, la literatura empírica nos ha mostrado consistentemente que los hombres juegan a videojuegos con más frecuencia que las mujeres, que los hombres juegan más tiempo, y que ambos géneros tienen la misma tendencia a considerar el juego como un interés masculino. En

Andrea Lewis & Mark D. Griffiths

Aloma

consecuencia, se ha llevado a cabo un estudio para examinar los temas principales en las experiencias y motivaciones de mujeres que juegan con frecuencia a videojuegos "casuales". Las participantes fueron 16 mujeres adultas, jugadoras casuales, que contestaron a dos entrevistas de autoinforme en línea (al principio y al final del estudio) y que participaron en un blog/diario en línea y un fórum de discusión durante un período de cuatro semanas. Se analizaron los datos para los temas principales con el Análisis Temático. Los resultados mostraron áreas que eran importantes para las jugadoras casuales, incluyendo conocimientos periféricos de los juegos, compromisos domésticos y prioridades personales influenciadas por el juego, y la inversión social, económica y emocional de los juegos. Al explorar los temas prominentes subyacentes a las motivaciones de las mujeres para jugar a videojuegos, los resultados nos proporcionaron posibles nuevos líneas de investigación sobre mujeres jugadoras desde perspectivas de género positivas.

Palabras clave: videojuegos, género, análisis temático