Abstract

International evidence indicates that the number of females involved in video-gaming is increasing. Within the context of this increase, there is a need to explore the experiences of this group of gamers in detail. This study explored female experiences of playing video-games. Data were collected from an online discussion forum dedicated to video-gaming; the sample comprised of posts drawn from 409 discussion threads. Thematic analysis of the discussions suggests that gaming is a key element of the female gamers' identity, with females discussing the integration of gaming into their daily lives on a number of different levels. Similar to previous research, social elements of gaming is highlighted with simultaneous difficulties with online interaction emphasised. These themes are discussed in relation to relevant research in the area, along with recommendations for future research and consideration of possible explanations for the themes observed.

Introduction

International research has consistently found that compared to females, males play video-games more frequently, are attracted to different games, and play for longer (Rideout, Roberts & Foehr, 2005; Anderson, Gentile & Buckley, 2007; Olsen, Kutner, Baer, Beresin, Warner & Nicholi, 2009; Coyne, Padilla-Walker, Stockdale & Daly, 2011). Therefore, further research is needed to explore these gender differences in motivation to play, and experience of playing. Researchers have argued that the gender differences reported in gaming may be related to (i) socialisation factors (i.e., females not being socially rewarded for playing video-games in the same way as males), (ii) video-games typically being designed by males for other males, and (iii) males having better spatial ability skills than females thus aiding gaming (Krahe & Moller, 2004; Griffiths, 2007; Olsen et al, 2009). However, *Entertainment Software Association* (2012) reported females now represent 47% of US gamers, with females aged over 18 years representing the fastest growing gamer demographic.

Motivation to play violent video-games

In exploring gamer's motivation to play, research has indicated various factors that make games more attractive to MGs than FGs. Hartmann and Klimmit (2006) research with FGs indicated that females disliked the violent content of games, and stereotypical game characters. In a second study, they conducted an online survey and argued that FGs were less attracted than MGs to the competitive element in violent video-games, similar to previous research with FGs (Griffiths, Davies & Chappell, 2004; Lucas & Sherry, 2004). The researchers argued that if competing and winning were not appealing incentives to FGs, then other incentives identified as important to MGs may not be as relevant for FGs.

Olsen, Kutner, Warner, et al's (2007) study indicated that adolescents key reasons for playing video-games related to emotional regulation, relaxation, and the ability of gaming to reduce loneliness. Similar findings have reported gaming offers a means of escape from everyday stress and relaxation by adults and adolescents (Klimmt, Hefner & Vorderer, 2009; Padilla-Walker, Nelson, Carroll & Jensen , 2009; Snodgrass, Lacy, Denagh, Fagan & Most, 2011). Hussain and Griffiths (2009) reported online gaming alleviates negative feelings of loneliness, boredom, and/or frustration. Online gaming studies indicate that social elements of gaming are a key attraction of gaming (e.g., Cole & Griffiths, 2007; Griffiths, Davies & Chappell, 2003; Griffiths, Davies & Chappell, 2004a; 2004b; Yee, 2006). One study reported one-fifth of online gamers preferred to socialise online, rather than offline (Hussain & Griffiths, 2008).

In online gaming, gender differences are evident in the social interactions, but females may place a different emphasis on these interactions (Taylor, 2003). Cole and Griffiths (2007) reported over 70% of MGs and FGs made what they described as good friends online, and 42% had met them offline. Males made more friends in online games than females, but females were more likely to discuss sensitive issues online and meet them offline than MGs. Yee (2006) argued males are motivated by achievement and manipulation factors in online gaming, whereas females are motivated by relationship, immersion, and escapism factors. In relation to Massively-Multiplayer Online Role-Playing Games (MMORPGs), Cole and Griffiths (2007) noted that MMORPGs were highly social interactive environments providing opportunities to create strong friendships and emotional relationships. Furthermore, FGs were more likely than MGs to share and confide with people they met while playing online.

Reinecke (2009) reported on gaming as a means of developing friendship and support systems. This study found adults who received less social support from colleagues and supervisors played games at work more frequently than did individuals with higher levels of social support. Lucas and Sherry (2004) argued that while social elements of video-game play explain the motivation to

play, they also explain the lower numbers of FGs attracted to such play. The study argued that fewer females were playing video-games due to recognised social norms of gaming being a gender-specific activity.

Social interaction in gaming has also been explored from other perspectives. Coyne, Padilla-Walker, Stockdale and Day (2011) suggested that while gaming is associated with heightened aggressive behaviour and reduced prosocial behaviour in adolescents, when considering female adolescents alone, gaming was associated with a increased prosocial behaviour for girls when they played video-games with others. However, it may be significant that the prosocical measure used in the study related directly to prosocial behaviour directed towards the adolescents' family members (adolescent and parent reporting), and as such it could be argued that co-playing with a parent could lead to an increase in prosocial behaviour towards people they are playing with, rather than being related to the influence of gaming.

Character stereotypes in video-games

Various studies have used a content-analytic approach to analyse how video-game characters are portrayed in the media (Dietz, 1998; Beasley & Standley, 2002; Janz & Martis, 2007). Dill and Thill's (2007) content analysis of characters in gaming magazines led them to argue that over 80% of male video-game characters were portrayed as violent, while female characters were more likely to be portrayed in a sexualised manner. In a second study, the researchers asked undergraduate students to describe a typical male and female in video-games, and the majority (gamers and non-gamers) described the male characters as aggressive and females as being sexually objectified.

In terms of the impact of stereotypes on people's behaviour, various studies have explored potential impacts. Dill, Brown and Collins (2008) explored the impact of exposure to sex-typed

video-game characters on attitudes towards violence against women in undergraduate students. The participants were exposed to images of sex-typed video-game characters, which were argued would serve the function of a stimulus or a prime, as the researchers had argued that young people are aware of these gaming stereotypes.. Using the Sexual Beliefs Scale (Meuhlenhard & Felt, 1998) to explore people's attitudes towards female aggression, results indicated that long-term exposure to violent video-games correlated with greater tolerance of sexual harassment and rape myths. Violent video-games have been found not only to portray women in a stereotypical manner (Dietz, 1998; Beasley & Standley, 2002; Janz & Martis, 2007), but characters who are minority females are virtually absent in video-games (Burgess, Dill, Stermer, Burgess & Brown, 2011). This stereotypical portrayal of female characters may be a reason why fewer females are attracted to playing video-games (Lucas & Sherry, 2004; Ivory, 2006).

Character Identification

The ability to identify with a character and to develop an attachment to this character allows for a greater immersion whilst playing (King, Delfrabbo & Griffiths, 2010). The ability to personalise a character can encourage greater identification with the character, a finding which the gaming industry is eager to encourage (Klimmt, Hefner & Vorderer, 2009). The use of personalised characters in video-games is becoming more common with many games encouraging players to try out different character types. Research has indicated that many gamers value the opportunity to do this (Anderson et al., 2010, Fischer, Kastenmuller, & Greitemeyer, 2010; Konijn, Bijvank, & Bushman, 2007).

Griffiths, Davies and Chappell (2004) found that 60% of online gamers had gender-swapped and 72% had role-swapped (Griffiths, Davies & Chappell, 2003). Hussain and Griffiths reported 50% of online gamers had gender-swapped, with more females than male players enjoying this aspect

of online gaming. FGs have also reported motivation to engage in gender-swapping when playing to avoid male approaches to them while playing online (Hussain & Griffiths, 2008). Klimmt, Hefner and Vorderer (2009) described video-games as possible identity laboratories allowing people to experience different identities. In contrast, one study suggested that gaming may inhibit identity exploration with MGs and FGs (Padilla-Walker et al., 2010) .

Game immersion can be of significant value to players (Wood, et al, 2004: Ivory & Magee, 2009; Hussain & Griffiths, 2008; 2009; King, et al, 2010). Some authors (e.g., Wood, Griffiths & Parke 2007, Snodgrass, Lacy, Denagh, Fagan & Most, 2011) have reported time loss while playing video-games occurs for both MGs and FGs, and was perceived by gamers as a positive benefit of gaming that allowed them to fully relax. Hussain and Griffiths (2009) reported less than one-third of gamers experienced detachment during online gaming, however, for some online gamers, the ability to immerse oneself helps facilitate an escape from offline-life (Frostling-Henningsson, 2009). In Hussain and Griffiths' (2009) study, less FGs reported feelings of detachment than MGs. In relation to FGs, greater levels of immersion and identification have been reported by females playing violent video-games when playing as a female character, rather than a male character (Eastin, 2006).

Lewis and Griffiths (2011) carried out a qualitative analysis of female casual gamers. They examined key experiences and motivations of FGs through thematic analysis of online discussions and interviews with 16 female adult gamers. The key themes identified were similar to previous research with FGs discussing motivating factors of games (mood modification, escaping reality, and allowing social interactions). Findings suggested that identification (emotional connection) with characters and games was a strong motivating factor for FGs, while also valuing the ability to act competitively and to customise the games played. Although the study examined casual gamers, some played other game genres (e.g., MMORPGs), Recent research with online gamers suggests FGs are more likely to play role-play games rather than other online game genres, with

almost 20% of players female, compared to 5% of those playing First Person Shooter (FPS) players and 1.3% of those playing Real Time Strategy (RTS) games (Ghuman & Griffiths, 2012).

The present study was designed to explore the experience of gaming, and the attraction to (and experience of) gaming. The study used discussions made by FGs on an online public discussion forum. Previous research exploring secondary data from online gaming forums, has primarily focused on players of just one or two online games such as *EverQuest* (e.g., Chappell, Eatough, Davies & Griffiths, 2006; Griffiths, Davies & Chappell, 2003). It has been argued that this method of data collection in the field of gaming research can be invaluable as it offers opportunities to consider new insights unavailable with other data collection methods (Griffiths, Lewis, Ortiz de Gortari & Kuss, in press)

Method

Data collection

The data were collected from a public online discussion forum intended for FGs. After surveying various different online gaming forums, one particular website was chosen for analysis is it was predominantly used by FGs who played a variety of different genre of games. The discussion forum contained approximately 24,315 posts in the general discussion area of the gaming website during May 2012. The posts reviewed were those made during the period of May 2011 to May 2012. The total number of discussions made during this period was 409. The majority of the forum participants were female and played a variety of game genres (MMORPGs, FPS, RPGs, RTS, fighting games, war games, strategy games, platform games and adventure games). The most common games that the FGs highlighted as favourites were FPS and RPGs followed by action games, horror games and platformers.

Ethical Issues

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It has been argued that participants in online forums cannot have expectations of privacy as they are freely accessible to the public (Hurley, Sullivan & McCarthy, 2007). All of the postings in the present study were on an online forum in the public domain and usernames and passwords were not needed to access the site. However, similar to previous research with online discussion forums (Maratea, 2011), measures were included to protect individuals' anonymity: specific details of the website is not disclosed and the comments made are identified by a pseudonym only. The researchers did not participate in online communication or online interviews on the site. All names and identifying information have been changed to ensure confidentiality of all people who posted on the site.

Process of identifying themes

Thematic analysis was chosen to analyse the data collected because of its flexibility and depth in allowing for an exploration of participants' feelings and motivation (Braun & Clarke, 2006). The initial coding of the data led to identification of four main discussion types. These were coded as (i) *social* (introductions by FGs and recruitment for guilds and clans) comprising 110 discussion threads (ii) *computer game/platform specific* (new games, features, discussions of particular games, suggestions, advice, tips and game trivia) comprising 205 threads, (iii) *miscellaneous* (non-gaming topics) comprising 51 threads, and (iv) *attitudes and opinions* (in depth discussions of FGs thoughts on their experience of gaming) comprising 43 threads.

Following the identification of the main categories of the discussions, the researchers focused on the *"attitudes and opinions"* category and discussions within this category. The researchers worked within an inductive thematic analysis, which can be described as a method of observing themes from the data without having a particular preconception of the various themes that would emerge (Braun & Clarke, 2006). As noted above, this category comprised 43 discussions, with 1,559 posts. These discussions were coded into four categories based on their title and content as:

(i) playing online, (ii) characters, (iii) gaming habits and (iv) male vs. female gamers (see Table 1).

Following initial familiarising of all data, the discussions were read and responses were collated under main themes, and allocated provisional labels. Responses were then re-read and further sub-themes were identified, and the initial themes redefined. The responses were explored for both actual and semantic meaning, allowing for the development of more meaningful and rich data to be analysed. The semantic approach to data analysis examined the themes that were observed and at times looked beyond the observations and theorised possible reasons and implications for the themes, in order to allow a more comprehensive exploration of the FGs' experiences of (and motivation to) playing violent video-games .

Results

The analyses of posts on the general discussion forum identified four categories (playing online, characters, gaming habits, male and female differences). These discussions were explored and three main themes emerged from the analyses: identity, social and motivation. Each of the themes comprised various sub-themes.

(1) Identity: There were four 'identity' sub-themes, and these related to gamers' introduction to gaming, their identity as a gamer online/offline, and their identification with gaming characters.

Family *"We all play games in this family, guess the family that games together stays together LoL"(ET2).*

The majority of the FGs started to play video-games aged 6-7 years, and the vast majority were introduced to gaming by parents (usually a father), followed by siblings/other close family members (e.g., grandparents, uncles, cousins). The theme of family influences on the development of an interest in gaming was seen in frequent discussions about the gamers now introducing

gaming to their younger siblings, own children, nephews and/or nieces. The FGs often spoke of a continued passion within their families for gaming, and at times of a disappointment when they no longer shared this experience with family members:

"As young children my brother and I played video-games nearly every day, but now I am the only one who does which kinds sucks, that's what me and my bro would kinda bond over" (BA1).

Others spoke proudly of continued interest in gaming within their family, with game nights, playing online with family members, and playing with partners commonly mentioned.

'Girl Gamer' Label *"I'm a gamer who just happens to be a girl"* (L1)

The posts ranged from discussions about the merits of the labels of FGs versus MGs and what this offered to gamers, to the experience of FGs whilst playing. In terms of what the FGs defined a 'girl gamer', there were mixed opinions on what game genre gamers had to play to be considered. Many of the FGs argued that certain game genres played (i.e, casual games, *Facebook* games, and *Wii* games) were not girl gamers. The key elements classifying a girl gamer were spending large amounts of playing time, being competitive, and being passionate about their gaming. In relation to feelings about the label 'girl gamer', some liked the label but the majority talked about the importance of just being a gamer:

"I'm proud of my gaming heritage, I've grown up my whole life playing...All I can say is a gamer is a gamer" (Z2)

Others talked about how the label can lead to further differentiation between males and females who are gamers:

"Calling ourselves girlgamers does reinforce that divide on some level" (T1).

Some of the FGs were proud of their gaming habits and the identity of being a gamer:

"I've grown up my whole life playing and have committed a lot of my time to learning about games as well as playing them" (Z2).

Virtual Identity

The identity that FGs chose to explore and disclose online were directly linked to their experience of playing and others' attitudes and behaviours towards them while playing. This was a very common theme, with many threads linked to the experience. MGs and FGs discussed the treatment of FGs as they played online games, including references to sexism, abusive language, unwanted advances, and threats experienced. Gamers talked about their experiences of having to block people, ignore friend requests, and getting inappropriate emails/pictures sent to them after playing online as a FG. At least five females disclosed that they had made official complaints about the behaviour of other MGs. One female talked about being *"stalked"* by a person she met online who followed her around online for over a year. Two participants talked of being extremely afraid and giving up gaming as a result of the way they were treated online by others:

"Problems started when they found out I was a real girl, the only one in the guild at that time. I pitched in with key info or anything people would deliberately talk over game and ignore everything I said…I cried and was so devastated I actually quit gaming for almost two years" (C1)

In response to this online behaviour, the majority of discussions focused on how FGs chose not to identify themselves as females when playing with others, as they felt alienated and treated differently to MGs:

"[I] usually keep my gender to myself when playing online due to stuff like this, makes for a much more relaxed playing experience" (Z1)

"I had to hide my identity and pretend to be a guy, if the players knew there was a girl playing there would be endless harassment (especially if you were better than them!)" (C1).

One gamer gave an account of where she disclosed her identity as a FG:

"I had not spoken out loud at any point 'cause I am not one to talk to strangers....and they were all like 'you're a girl' and I said 'ye'" and they voted and kicked me out of the game. I had the highest amount of points on my team" (V1).

A number of females felt the only option available to avoid negative experiences was to hide their identity, with the majority stating that they did not talk to others when gaming online:

"I don't talk, I let my guns do the talking" (RS1).

Others talked about a strategy they used of being rude back to rude and abusive MGs. FGs were unhappy about having to deal with this behaviour online and meant they only played online with friends and family:

"It's annoying, can't I just be me, without having to hide behind other non gender related gametag?" (MJ1).

The majority of the FGs attributed negative behaviour encountered to the MGs being adolescents.. Some FGs talked about how they sometimes acted aggressively online. For instance, one gamer said: *"I am generally very nice, but when I'm gaming I work off other people in the lobby respect" (G2),* with discussions making reference to cursing and throwing controllers and being *"snarky and aggressive" (T3),* during competitions and times of battle.

Identification with Characters *"Bikini Clad girl with an arsenal of weapons and big boobs...beside a guy in a suit!" (LT1)*

In terms of character identification, the data indicated that the majority of FGs preferred to play as a female character in games they played, and disliked that in certain games this was not possible. The FGs discussed the elements of characters they liked and disliked. The most popular theme about preferred characteristics of FG characters was in relation to the character's personality in games (e.g., being *"cool"*, *"sarcastic"* *"independent"*, *"brave"*, *"tough"*, *"loving"* and *"sweet"*). One gamer wrote:

"Independent strong beautiful girl that does whatever she wants!..Fierce chick, also does whatever she wants and seems to be very courageous after" (M1)

Gamers described the characters' physical characteristics portrayed in games and highlighted the way they were attarctively dressed:

"She's smart and sexy and has an awesome, beefy partner. Plus she gets to own zombies in a mini skirt" (V1).

Realistic storylines and characters were important for some gamers:

"Because she's so realistic, she's just your normal teenager…she doesn't have huge boobs or skimpy clothes and I think she's a pretty good runner" (A12).

"She's tough, and actually seems like she could be a real person" (T1)

Discussions also focused on the relationships that characters had with other characters in-game, and was a characteristic making characters attractive to FGs (i.e., characters being good friends or being in a relationship). Fighting ability was a key factor for gamers with mention of characters being:

"Tough…kickass…balanced attack and defense styles" (U1)

The FGs talked about the characters in the games being role-models or providing inspiration:

"*I've always looked up to her as a kind of role model*" (GK 1)

"*She's my hero, and we look alike*" (B2)

Some discussions focused on how characters made a direct impact on the players making the gamers wanting to change:

"*Playing her has inspired me to get in better shape*" (U1)

"*I want to be her*" (voiced by a number of different FGs)

Gamers identified with the characters in various ways, highlighting how similar they felt characters were to themselves. Discussions linked to two key areas of self-identification (i.e., physical characteristics and personality characteristics). One gamer noted that she identified with a FG character as "*I could see my husband having to carry me*" (J1), while another stated that she played one game with a particular character frequently during a period in her life "*because I was blonde at that time, so it worked*" (GK1). Others talked about how they had taken characters' elements and brought these into their own lives "*dressed up for Halloween last year, everything in my costume was exact*" (Z3). Another talked about how she "*once bought a gold dress for cocktail party, just like one she worse in that iconic scene*" (S2). In terms of personality characteristics, the FGs highlighted certain female characters' elements in-game that they identified with. They talked about how a character was:

"*Shy and feminine character, whom resonated with me when I was young and shy…she is like a representation of me*" (V2).

Others identified with characters because *"She is kind-hearted and soft spoken, kinda like me"* (T2), while another noted *"We both have the same personality"* (I2).

(2) Social: There were two 'social' sub-themes (i.e., gamers online play, and gaming with significant people in their lives).

Online Interaction

The negative experience that FGs experienced when playing online was a prevalent theme in all discussions. There were ten discussions on this topic yielding 297 posts from members over the year analysed. As previously discussed, FGs talked about experiencing abusive language, unwanted advances, threats, and racism while playing online with strangers. One commented:

"Not everyone should be allowed to use their mic online, there should be some sort of test for people to pass before they are allowed" (TR1)

While most discussions related to negative treatment of females by MGs online, some discussions focused on the treatment of females by other females, and noted that sometimes other FGs did not like having other females playing with them:

"*Another girl turns on her mic and starts acting hatefully towards me and says things like 'Ugghh another girl' in a rude tone…I didn't provoke her...It's like it's a hassle for some girls to play with other girls"* (L1).

"So far most of the girls I've met are rude" (G1)

Some FGs discussed the possibility that females already playing (and accepted by the males they play with) want to appear tough and so reject other FGs when they play:

"I suppose they want to appear 'tough' online" (P1).

Others argued that some who play like to be the only girls playing to receive attention:

"They must just want to be the only girl in gaming" (S1)

Other gamers wondered why females highlighted that they were girls, as gender did not matter if playing well:

"If you need to point out you're a girl and you play, then their [they are] obviously going for the attention factor" (Z2)

Playing with significant others

FGs talked about playing in online/offline settings with others, while significant mention was made of playing with partners, friends, sisters and brothers. Comments suggested that FGs liked to play with others but also alone. The dominant theme was of FGs playing online with known people, rather than people they had met online. Some FGs talked about the game requirements: *"Most of the games I play require a strong team"* (H1), or the need to play with others as part of a campaign. Gaming's social element was a strong theme that emerged with one FG stating that playing with others *"adds a social element, a sense of team work"* (R3). Others mentioned the role of mood, determining who they played with:

"A little bit of everything, Sometimes I'm in the mood for playing alone, other times I'd rather play with friends...really depends on my mood and who's online etc" (R2).

The discussions indicated a predominant theme of flexibility in FGs' preferences and routines, with the majority of gamers stating they played alone and, at times, with others:

"I like all of it, although big groups can sometimes get out of hand with everyone talking at once" (F2).

Some of the FGs highlighted the importance of female only websites and discussion forums, as a way to meet other FGs:

"It's great to know that these ladies share the same interest because I personally know few girls who game," (N1).

A number of times, FGs mentioned they did not have friends to share their passion for gaming with and so discussion forums enabled finding people they could share experiences with:

"This girl gamer site is good [cos] it's really hard to find girls I have things in common with on the internet" (W1).

Similarly, there were many introduction threads with FGs introducing themselves to other FGs (61 over the year). These discussions led to 5.8 replies (mean average), as other FGs welcomed new members.

(3) Motivation: There were three main 'motivation' sub-themes, and these related to the enjoyment of gaming, the use of gaming as way to escape reality, and immersion in gaming.

Outcomes: *"It helps me to unwind from a long day at work, a stress reliever, mood enhancer and for fun"* (LL1)

FGs discussed the games they enjoyed playing and their intrinsic benefits (e.g., relieving stress):

"Gaming keeps my mind off things" (ER1)

Discussions also related to playing video-games to unwind and facilitate mood change:

"*When I play it is like and extension of my mood*" (HE1).

Gamers used games as an escape from reality, with references to "*getting away*" and going "*into another reality*", while others used gaming for relaxation (e.g., "*I play to wind down from the day*", GT1):

"*I feel I have had a little break from the day to day issues we all face, its a chance to shut down and think of nothing*" (R4)

Some FGs discussed the skills they had and the sense of power they felt when gaming (e.g., "*I play because I feel a sense of power. I'm able to show off my skills*", HE1), or "*because I realised I have an insane skill for a girl, even sometimes for a guy*" (SB1). Discussions also highlighted the importance of gaming's social element. Games facilitated a social interaction need and also a chance to play co-operatively in order to achieve common goals. Another predominant theme was the interactive nature of video-games :

"*I have a greater love for video-games than I do other forms of entertainment because of the interactive nature....you get involved, you get to feel the emotion and the intensity*" (CC1).

Discussions also related to the storylines, use of narratives/graphics, and music. This made gaming more interactive than other media forms (e.g., "*Feeling like you are part of a story instead of just watching it is engaging*", R1). Playing for fun and general entertainment was a popular reason for playing:

"*Because its fun!! And exploding heads are also pretty satisfying*" (SF1).

Realism versus Escapism "*Giant boobs do not make for a good female lead in any game*" (H2)

FGs' discussions were often related to stereotypical characters in violent video-games and how they felt about this. They argued there was a predominance in terms of female characters being

represented in a stereotypical manner in violent video-games, with only *"a handful of games that aren't filled with poorly clad women"* (S2) and that "*even in war games where women are not players, there is usually a woman as a victim".* FGs particularly mentioned their dislike of *"silly and giggly"* characters, and there was a general feeling that the games were designed for MGs rather than FGs. This reduced gaming enjoyment for some FGs:

"*I don't like playing games where you play as a scary, whiny girl, these games annoy me and are not worth playing"* (R5).

Discussions highlighted beliefs that female game characters were not designed for fighting:

"A female character this skinny little body, huge boobs and barely any clothes....how am I going to protect myself in pasties and a loincloth?" (M2).

FGs therefore argued that there were large discrepancies between male and female character portrayal, particularly in terms of clothes, as it is common to see *"fully armoured male warrior next to a scantly clad female warrior"* (W1). There was a general feeling amongst some FGs that this is improving with more realistic female game characters becoming commonplace as the gaming world moves away from "*the bikini clad girl, with an arsenal of weapons*" (C3).

In terms of choosing characters, there was much discussion on the perceived need for female characters in games (e.g., "*I hate when you can't pick to be a girl in a game"*, C1) and dislike of having no choice except to be a male character in many games. More specifically, many FGs discussed a desire to customise their characters in more detail. For instance:

"If I get a chance to pick everything down to the colour of a character's toenails, I'd probably play it" (H2).

One gamer noted there may be gender differences in character choice as her male partner "*just started playing the game with the default character"* while she "*spent 30-40 minutes customizing*

my character down to the specifics". Another gamer said when she customises her character, she makes the "*most ugliest character that I can possibly make because so many times you are forced to play with a female character...with huge boobs and barely and clothes*" (M2). Highlighting the characters FGs would like to see in games, one gamer suggested all that is needed is to design characters that are "*not unattractive, just not stupidly sexualised*" (W1). Some discussions noted that in video-games, all characters are stereotypical and unrealistic, and even male characters are portrayed as *"meatheads, portrayed as raw masculinity without any kind of thoughtfulness or intelligence"* (D2, male gamer). For instance:

"Nobody complains about the way the male character looks" (W1).

There was a general feeling in all discussions that there was a move towards having stronger female game characters, and that this was a positive development. However, some gamers argued that characters are not realistic for a specific reason:

"*Yes it's not realistic, We play games to get away from reality, so why not put it over the top*" (GB1)

Here, FGs discussed the use of video-games as an escape from reality, and highlighted the need for games to have unrealistic characters to facilitate their separation from reality as they play. Some FGs acknowledged and appreciated the way the characters were dressed and the overall unrealistic portrayal of female game characters:

 "*I don't mind the skimpy outfits, to me its just like Halloween, pretending to be someone else*" (M2).

Immersion

When discussing gaming frequency, FGs' times ranged from one or two hours per day to "*within the full time job range*". Discussions focused on significant incidents occurring in people's lives and impacted on gaming time. For instance:

"*If I didn't have a full time job, it'd be more like 60+[hours a week]*" (LD1).

Gamers talked about key events in life (e.g., holidays, unemployment) when they would play more, indicating flexibility in their gaming routines. Gamers also talked about incentives to play when they played new games or an engrossing game, leading to increased playing times:

"*When I had a new game to play or a game I want to beat, around 6-10 hours a day*" (CF1)

There was little indication of time loss in relation to gaming. One gamer stated: "*I played for 6 hours straight last Saturday, without realising it until I went to the restroom and noticed my eyes were burning, The games, they take over*" (LD1). FGs frequently mentioned blocking out other things from their lives while gaming, and one mentioned she could be distracted from what she was *"supposed to be doing"* by gaming and feeling guilty afterwards. FGs also discussed feelings of anger and frustration when they were not doing as well as they would like to during a game and some mentioned the feelings of irritation if anything distracted them while they played.

Discussion

The predominant findings in this study related to the role of identity and social interactions in female gaming. The FGs' valued their identity as gamers, and was highlighted by the reported frustration they feel with the inability to chose female game characters. Paradoxically, in contrast to this interest in and adoption of a gaming identity, the gamers often felt the need to hide their identity when gaming online, due to the behaviour of other MGs (and sometimes FGs). The importance of the social gaming elements for FGs was a central feature related to both identity and motivation to play, and a consistent finding in previous research (Hartmann & Klimmt,

2006,Yee, 2006; Cole & Griffiths, 2007; Hussain & Griffiths, 2008; Klimmt, Schmid & Orthman 2009). The FGs also highlighted the peripheral communication occurring outside of actual gaming (for example, in the sharing of gaming experiences with significant people in their lives and meeting likeminded people on discussion forums).

Interestingly, playing motivations and immersion (and amount of playing time) indicated a real flexibility in female gaming, and confirmed previous research (Lewis & Griffiths, 2011). This flexibility of how and when they were able to game suggests FGs had control over their gaming even though they valued it as a key part of their life, rather than the gaming taking control of their lives. As previous research has proposed that video-game play can be associated with decreased success in other activities such as academic work (Anand, 2007; Anderson & Dill, 2000), a consideration of this flexibility may indicate a level of control over gaming that may not impact on other activities in FGs' lives.

Identity

There were a number of discussions by FGs related to the use of the term of 'female gamer' as opposed to 'gamer' and the need for this title. There were mixed opinions, with some females emphasising the value of online discussion forums that were spaces where females could discuss gaming. This was highlighted as important for these gamers as they did not have many female friends they could discuss gaming with. However, other FGs felt there was no need for such a term, as they were gamers first and foremost, regardless of gender and the term simply highlighted gender differences further. The FGs' discussions of their gaming origins was often related to the theme of family gaming, with many gamers talking proudly of how their parents and other family members introduced them to gaming, and how they were now introducing the games to their younger family members. In relation to gaming alongside family members, recent research has

proposed that the impact of adolescent gaming alongside key family members may to lead to an increase in pro-social behaviour for females (Coyne et al., 2011).

The most prevalent discussions under this theme were related to the need expressed by the females to hide their female identity when playing online with others, due to encountering negative experiences. There were significant discussions regarding the abuse and negative behaviours that FGs had encountered, even after playing with people for a time before this disclosure. Some of the females outlined their reluctance to reveal their gender, to play with strangers because of this, and for some this experience led to them stopping playing games for significant periods. Previous research (e.g., Hussain & Griffiths, 2008; Griffiths, Davies & Chappell, 2004) highlighted the importance of gender-swapping and role-swapping within gaming for MGs and FGs, but the present research suggests a different motivation for engaging in this behaviour, directly related to avoidance of others' behaviour. The use of female discussion boards may become even more important for FGs, as this is the most relevant social space where they feel they can identify themselves as FGs. The discussions that took place on the discussion forum were done so in a 'safe' environment and facilitated honest accounts of FGs' experiences. The results also suggest that previous research may have underestimated the amount of FGs playing online as many females may choose male identities while playing.

In terms of the negative behaviour of others while gaming, the discussion tone and words used suggest FGs were accepting of this behaviour and believed it was inevitable. While unfair, many FGs had adopted ways of overcoming this, mainly by not revealing their identity online and/or by only playing with known gamers. While it was something that FGs' reported unhappiness with, for the majority of females it did not appear to present an obstacle to them playing and/or prevent them from playing.

Klimmit, Hefner and Vorderer (2009) proposed that during media exposure, users will adopt elements of the perceived identity of the target character and temporarily at least perceive or imagine themselves to actually be the media character. In this study, identification with characters was reflected in gamers' interests in taking elements of characters into their lives, despite a mixed view on the stereotypical characters found in video-games. The FGs highlighted identification with characters physically and in terms of personality characteristics, that allowed gaming immersion, but also to transfer game elements and characters to their own lives.

The FG's identification with game characters was directly linked to their discussions about characters being role models to them and/or inspiring to them in real life. This appears a surprising finding but also reveals the importance of gaming to women as an area of their lives extending beyond just a hobby, and becoming part of their personal identity. Previous research on FGs has not explored this topic in any detail and is a potential area for future research. Klimmit, Hefmer and Vorderer, (2009) argued that video-games offer a virtual identity laboratory, and that gamers particularly value elements of their own identification with video-game characters, and particularly evident in this study.

Social

The theme of social interaction was seen in both discussions of gaming attractions and in the discussions of forum use. Gamers talked about the importance of gaming interactions (playing with others), interactions peripheral to actual gaming (accessing gaming forums), the sharing of gaming experience with significant others (family, friends, partners), and difficulties encountered with online social engagement (with males and females). The majority of females highlighted the importance of playing with others, with many mentioning that they played with boyfriends/partners. Furthermore, many discussions mentioned joining guilds and working with

others online and supports previous research highlighting the importance of social interaction for FGs (e.g., Cole & Griffiths, 2007).

Research suggests the importance of social elements in gaming, and the use of gaming as a medium for developing relationships (Cole & Griffiths, 2007; Griffiths, Davies & Chappell, 2003; 2004; Hussain & Griifiths, 2008; 2009). In this study there appeared to be a prevalent theme amongst the FGs to play online with other people that they know, rather than to develop new friendships online, supporting previous research (Cole & Griffiths, 2007; Yee, 2006).

In contrast, researchers have argued that online relationships may facilitate the formation of permanent and rewarding friendships (Longman, O'Connor & Obst, 2009; Yee, 2009), with some research (e.g., Cole & Griffiths, 2007) arguing gamers make real and significant friendships online. It could be argued that the current study samples a particular group of people who are not interested in meeting others online. An alternative explanation may be related to the reported experiences from many FGs of unsolicited male (and female) attention/abuse while playing online, which may not have been as common in earlier studies. Previous research made reference to this negative experience, with FGs reporting avoidance of male attention as a reason for gender-swapping (Hussain & Griffiths, 2008). In this study, this was an extremely common theme discussed.

Motivation

Attraction to video-games for FGs was related predominantly to the role of social engagement, in terms of physical interaction (playing alongside significant others) and virtual interaction (playing online/discussing gaming online). Engagement and identification with characters and storylines was believed to facilitate escapism and relaxation, which FGs highlighted as important for their gaming enjoyment. This confirmed previous research on FGs (Klimmt, Hefner & Vorderer, 2009;

Lewis & Griffiths, 2011; Padilla-Walker, Nelson, Carroll & Jensen , 2009; Snodgrass, Lacy, Denagh, Fagan & Most, 2011).

The discussions indicated that FGs identified with characters and immersed themselves in games they played. While many highlighted the need for more realistic characters to choose from, there was a predominant theme of enjoying interactive gaming, with mixed attitudes towards the stereotypical characters in games. There was a feeling that video-games are designed to be unrealistic and as a form of escapism from reality and this necessitated the characters being unrealistic forms of both females and males. Others argued that character realism has improved and that characters have graphically developed. Female characters are still stereotypical but not as "hypersexualised" as they were in the past and the general feeling was that this is a positive change, in terms of control. Gamers also discussed the importance of taking control of their gaming through choice of character that they play, with many FGs indicating frustration with (and a lack of attraction to) games that did not allow this element of choice with the characters they played. Similar findings have been reported by Hartmann and Klimmit (2006) with FGs indicating their unhappiness with stereotypical female characters.

These findings may be interpreted in relation to Dill and Thill (2007) who argued that gamers and non-gamers are aware of the stereotypical portrayal of characters in video-games, with male gaming characters portrayed as aggressive, and the females with direct reference to sexually objectified physical symptoms. In this sense, it is not surprising that female characters may be "accepting" of unrealistic and stereotypical characters portrayed in video-games, as this is a portrayal that both gamers and non-gamers are aware of. An alternative explanation may be that some females, at least, are accepting of these stereotypical characters as the playing of games as a non-realistic character facilitated this escape to a greater extent, than a realistic character would do. Research has suggested that the use of unrealistic characters may allow gamers to overcome

their concern regarding the violence they are engaged with in video-games (Hartmann & Vorderer, 2010), an argument that could be relevant in this study. The FGs attributed negative behaviour they encountered online to adolescent males. This perception is in direct contrast to previous research which has argued against a stereotypical view of male adolescents as 'typical' gamers (Griffiths, Davies & Chappell, 2004).

There was little indication of time loss from the FGs, although gamers did talk about gaming for extended time periods. There was a theme of flexibility observed in FGs' discussions of their gaming which was pronounced in discussions of how long people played for. FGs mentioned times when they had played for extended periods and these related to times when they had free time (e.g., on holiday, unemployed, weekends), rather than any discussion of gaming impacting on key activities day-to-day. This is similar to previous research (Hussain & Griffiths, 2009), that found gamers used their time effectively when incorporating gaming into their lives. Previous research on casual FGs noted a majority of gamers felt guilty about gaming (Lewis & Griffiths, 2011). It could be argued that the stereotypical view of gamers, and of FGs in particular, can lead to FGs not fully engaging in gaming as a valid pursuit due to the stereotypes associated with it and its perception within society. Therefore, it could be argued that while FGs are immersing themselves in gaming, this may be to a lesser extent than MGs and may have implications for the research exploring the impact of violent gaming. A similar argument has been put forward by Lucas and Sherry (2004) who suggest that the social norms for gaming means that females are less likely to play these games. The majority of this study's gamers played action and FPS games but the discussions did not emphasise any particular element of these game genres.

Limitations and further research

The primary weakness of the current study relates to the reliance on secondary data, with different samples in every discussion that was analysed. Other limitations may be related to the fact that

any posts on the discussion board that were included in the analysis as female posts may actually have included postings by males. The initial analysis and familiarity with the data involved the researchers excluding any posts that appeared to be made by males, either through use of male user names or through self-identification as a male. In this sense the analysis may be missing some FGs' opinions or including a small amount of male postings. Recently research has explored key themes that emerged in solicited interviews and online discussion forums with female casual gamers (Lewis & Griffiths, 2011). This study is one of the few conducted on FGs, and the first to explore naturalistic discussions among FGs. However, the findings may not generalise to all FGs, as the qualitative nature of the study was designed to allow an exploration of some of the key themes rather than a large scale study of FGs. It might also be argued that the participants involved in the study may be representative of a particular group of gamers who are involved in particular gaming websites, and as such there may be a particular cohort of FGs that it would be interesting to carry out future research with.

Overall the present study indicates that the FGs are enthusiastic about the future of gaming and the move towards greater choice and control in relation to game character choice. The FGs indicated flexibility in their playing, with little indication that gaming had a negative and controlling effect on their lives. The role of interaction both online and offline was noted as a predominant theme for FGs, and this may be related to both identification with gaming characters, but also to the reluctance of FGs to identify themselves as female while playing online. It appears that while there is a need for better female game characters to be developed, in certain gaming environments (and for some gamers), the game is more important than the character and often gamers do not wish to be identified as female while playing. Current research on gaming suggests that this is an activity that is predominantly played by males, in studies completed with children (Anderson, Gentile & Buckley, 2007; Escobar-Chaves & Anderson, 2008; Gentile & Anderson, 2003) adolescents (Anand 2007; Olson et al. 2007) but also in adulthood (Griffiths, Davies, &

Chappell, 2004; Padilla-Walker, Nelson, Carroll & Jensen, 2010), although it appears this pattern of gaming may be changing. At present there is limited research on FGs and further research in this area is needed to explore the experiences of this gaming group as the number of FGs increases, and it could be argued, their identity as a gamer becomes a significant consideration.

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Table 1: Main categories identified within "attitudes/opinions" discussions and the corresponding

discussion threads and number of replies.

Category	Number of Discussion Threads	Amount of posts
Playing Online	10	297
Characters	13	533
Gaming Habits	9	329

Male vs. Female Gamers	11	200
Totals	43	1359