ARE YOU A GAMER? A QUALITATIVE STUDY ON THE PARAMETERS FOR CATEGORIZING CASUAL AND HARDCORE GAMERS

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ABSTRACT

This article examines the parameters for categorizing gamers as hardcore or casual players and the relation between these parameters with special attention to gender differences. To investigate this, a qualitative persona-based focus group approach was employed, using a sample of 21 participants aged 18 to 37 years. Dependent on their average time spent on gaming, these gamers participated in a discussion on hardcore or casual gamers' behaviour and attitudes. More particularly, the following topics were dealt with: time investment versus available time for gaming and game related activities, budget spent on gaming, game genre preferences, opinion and self-identification with the typical image of a hardcore/casual gamer. Attitude towards challenge, competition, sociality, story and violent content in gaming was also taken into account. The main findings reveal remarkable gender differences both between and within the casual and hardcore gamers. It is therefore concluded that the categorization of gamers as hardcore or casual is not as straightforward as often assumed in large-scale quantitative studies. More research is needed to arrive at a categorization of gamers based on a combination of relevant parameters, accounting for the existing gender differences and the time spent on gaming relative to the gamer's available time.

1. INTRODUCTION

In the last decade, the game market has grown rapidly and games have become an important part of everyday culture (OIVO 2010; TNS 2009). Games are no longer played only by hardcore players who were typically male adolescents, but by a diverse group of players from children to elderly people in a variety of ways (De Schutter & Malliet 2009). Consequently, the traditional profiles of the typical game players have been challenged. Both in industry and academy, many attempts have been undertaken to get more insights into these new audiences and arrive at a correct categorization of the game players. Such a gamer categorization is relevant to the game industry, as it allows to design for and market games at a particular part of the gamer population. A clear categorization of the different types of game players is important for the academic world as well. In order to compare different studies in which several types of game players have been investigated, it is indispensible to be clear about the parameters used to categorize the gamers.

Various different categorizations have been defined in previous research. One of the first categorizations is that of Bartle (1996), who has distinguished between player types based on their approaches to playing a MUD game. He has categorized game players as achievers, explorers, socialisers or killers. Later, Schuurman et al (2008) used gamers' motivations to distinguish between the overall convinced gamer or fanboy, the convinced competitive gamer or competitor, the escapist gamer and the pass-time gamer or time killer. The majority of game player categorizations, however, have been dealing with a definition of casual gamers versus hardcore gamers. Various parameters have been used to classify players as casual or hardcore gamers, of which the following gained most popularity: average playing time over a period of time, average length of playing session, attitude and time invested in game related activities. Hard core gamers have been characterized as playing more than one hour a day on average (Van Looy, Schuurman, De Moor, De Marez & Courtois (2010), Schuurman, De Moor, Marez, & Van Looy (2008)), having purchased their own games (Schuurman et al. 2010; J. Van Looy et al. 2010), "being stubbornly resistant in playing the same game with way more that average interest." (Fritsch et al., 2006, p.2), and hence visiting and being active on game community and insider forums (Consalvo 2009; Fritsch et al. 2006). In contrast, casual gamers have been typified as spending less time on game play, playing in small time bursts and having a casual attitude towards gaming (Kuittinen, Kultima, Niemelä, & Paavilainen (2007)). The parameters discussed above more or less fit the three dimensions that emerged from a factor analyses that Ip and Jacobs (2005) performed on a 15 item questionnaire developed to distinguish between casual and hardcore gamers. They called the emerging dimensions playing habits, buying habits, and gaming knowledge and attitudes. This is an interesting study as it examines the parameters themselves, while most of the studies have categorized players without explicitly mentioning why a particular parameter was used.

To date, there is no consensus as to which (combination of) parameters should be used to classify players into hardcore and casual gamers. Consequently, it is hard to make generalizations with regard to differences among these types of players in term of game preferences and behaviour. Overall, some tendencies have been revealed between these two

player types with regard to gaming variables such as preferences for particular game genres, multiplayer or single player games, and levels of challenge and competition (Schuurman et al. 2010; J. Van Looy et al. 2010).

In addition, many studies have identified differences in gender distributions between casual and hardcore gamers, hereby mainly suggesting an overrepresentation of male hardcore gamers (Fritsch et al. 2006; Jansz & Tanis 2007; Schuurman et al. 2010; J. Van Looy et al. 2010). It should hereby be questioned whether this is the result of shortcomings in the selection parameters that have been used to recruit casual versus hardcore gamers, or whether this is a true reflection of reality. For instance, when it comes to time consumption, in general, women play less than men (Greenberg et al. 2010; Lucas & J. L. Sherry 2004; Schuurman et al. 2010). The result is that, when time is used as a parameter to categorize someone as a casual or hardcore gamer, the representation of women in the group of casual gamers is generally much higher than in the group of hardcore gamers. Another aspect on which men and women tend to differ when it comes to playing games is that of the preference for social interaction in games. Hartmann and Klimmt (2006) have argued that in their study women disliked games because of a lack of meaningful social interaction. In contrast, female respondents in a study by Lucas and Sherry (2004) indicated to be less motivated to play in social situations than their male counterparts. Schuurman et al.'s (2010) study in which female gamers seemed to played less often with others, than the male gamers. One difference between these studies that might explain these seemingly contradicting results is that in the study of Hartmann and Klimmt (2006) participants had to rate a fictional video game, whereas the studies of Lucas and Sherry (2004) and Schuurman et al. (2010) examined actual gaming behaviour. Regardless of the explanation for the contradicting results, evidence exists that men and women differ concerning preferences for social interaction in video games. Further, previous research has also revealed gender differences in preferences for game genres. Men have been found to prefer physical games such as sports, fighters, shooters and racing games, whereas women preferred more traditional games like quiz, card, dice, trivia, board and puzzle games (Greenberg et al. 2010). Similar results have been found in Lucas and Sherry (2004) who concluded that female respondents were less inclined to play games that involve mental rotation than men. Hartmann and Klimmt (2006) found that violent content was among the most important reasons why females disliked a fictional game in their study.

Finally, the motive to play games also differs between men and women. Men are more likely to be attracted to challenging games, while women see gaming as a superficial way of relaxing (Schuurman et al. 2010). In addition, men tend to be more attracted to competitive games than women (Hartmann & Klimmt 2006; Schuurman et al. 2010). Finally, women have been found to dislike a fictional game more because of the sexual gender role stereotyping of game characters (Hartmann & Klimmt 2006).

Summing up, evidence exists that men and women are not alike in their gaming behaviour. However, these gender differences are often not taken into account when gamers are categorized as casual or hardcore. Although there have been a few studies that focused on gender differences when casual gamers are concerned (Kerr 2003; Schuurman et al. 2010; Tausend 2006), in general little is known about the gender differences, especially when it comes to those gamers categorized as hardcore. This may have an impact on the gamer profiles resulting from the categorization. For example, as the large majority of gamers that are categorized as hardcore gamers are male, the profile of the typical hardcore gamer might not hold for the relatively small group of women that are also categorized as hardcore gamers.

This study examines the parameters that are meaningful in the categorization of casual and hardcore gamers, and the relations between these parameters. Special attention goes out to the relations between gender and the parameters. In order to achieve our research objective, a qualitative methodology was chosen. In particular, we opted for a focus group interview approach to examine the parameters in more detail. In the existing literature on the casual and hardcore gamer distinction, the majority of studies have used the quantitative method of the large-scale survey. While this is an excellent way to study average differences between groups of people, it might not reveal all details. Therefore, the current study can provide valuable complementary knowledge to the existing literature.

The article is structured as follows …

2. METHOD[1]

In order to achieve our research goals, namely gaining rich insights into the different parameters that can be relied upon to distinguish casual from hardcore gamers in a meaningful way, a focus group interview approach was chosen. The focus group interview (FGI) is a qualitative research method that can be employed in order to explore people's meanings, experiences or ways of understanding (Lunt & Livingstone, S, 1996). It usually involves a number of group interviews with several participants about a certain topic or interest and is guided by a moderator. The strength of focus groups is that it allows for exploratory, in-depth research, hereby collecting data that are complementary to what is retrieved in quantitative research ((Merton 1987; Fern 2001; Morgan 1997; Morse 1994; Vaugh et al. 1996; Ward et al. 1991). Consequently, this research method would allow us to arrive further than the general categorizations of hardcore and casual gamers that have been relied upon in quantitative research, and discover the underlying subtle differences in the parameters that can be used to classify game players. In order to start the group discussion, a typical hardcore and casual gamer profile was presented to the participants in the form of a persona. This persona would facilitate the discussion among participants by encouraging them to reflect on their own profile and gaming behaviour.

2.1 Participants

In total, 21 people participated in the focus group interviews. The participants' age ranged from 18 to 37 years. Participants were recruited through different channels. We posted messages on Belgian game forums and social networks. A newsletter was sent out and flyers were distributed on the university campus and student restaurant. This was important, as recruiting via game forums could result in only contacting hardcore gamers, ignoring possible participants who do not consider themselves a gamer (Schuurman et al. 2010). The term 'gamer' was omitted from the recruitment call, in order to address also the people who play less frequently. All possibly interested people had to fill in an online questionnaire, which gathered elementary demographic (age, gender, education) as well as different variables

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[1] This study was held in the second half of 2010. References to popular games, computer hardware and consoles should be interpreted with that time frame in mind.

related to gaming (top 5 of favourite games, last game(s) played, genre preferences, platform ownership, platform usage frequency, playing frequency by day of the week).

The results from the recruitment questionnaire were used to select the actual focus group participants. In total, four focus group interview sessions were held. The first session, Focus Group 1 (FG1), consisted of seven males who had indicated to play more than one hour a day on average. This was also true for the four female participants in Focus group 2 (FGI2). The participants who indicated to play less than one hour a day on average were invited to take part in the third (FGI3) and fourth (FG4) sessions. The third session (FG3) consisted of five males, while five females participated in the fourth session (FG4). Participants were rewarded with a gift certificate of €30.

Note that playing time per day was thus used to categorize the participants into two groups, which we named the 'casual' and the 'hardcore' gamer. Average playing time as a parameter for categorization was chosen as this parameter has been used in previous studies (Schuurman et al. 2010; Schuurman et al. 2008; J. Van Looy et al. 2010). Participants who indicated to play more than one hour a day on average were categorized as 'hardcore gamers', while those who played less were categorized as the 'casual gamer'. Using the same parameter for categorization allowed us to complement the results of these quantitative studies with more in-depth data from the focus group interviews in the current study. Each group was then split up according to gender, as previous studies consisted mainly of male gamers (Consalvo 2009; Fritsch et al. 2006; J. Van Looy et al. 2010). We also took game preferences into account, in order to include participants that play a diverse range of games, and not to over represent participants with a preference for one particular game or game genres.

2.2 Materials

In order to improve the group discussion, four personas were created based on relevant literature that covered gaming preferences, attitudes and characteristics of gamers (Consalvo 2009; Kerr 2003; Kuittinen et al. 2007; Lucas & J. L. Sherry 2004; Tausend 2006). A persona is a fictional character, created to represent a person or a group of persons within a targeted demographic. It portrays the general traits, attitudes and/or behaviour sets that represents this group of people (Adlin et al. 2006; Bagnall 2008; Chang et al. 2008; Junior & Filgueiras 2005). In total, four personas were developed, a casual and hardcore gamer, each in male and female variant.

In each of the four focus groups, one persona was presented, namely the one that, in theory, should represent their groups' time investment, gaming history, budget for gaming, social component of gaming and their perceived image. For example in FG1, which consisted of seven male hardcore gamers, we presented the male hardcore gamer persona. The persona gave an overall view on gaming habits and the incorporation in everyday life (See Figure 1). It consisted of different compartments namely personal and demographical information and different sections related to gaming such as budget, genre preference, time spent on gaming, challenge and attitude towards gaming (See Figure 1).
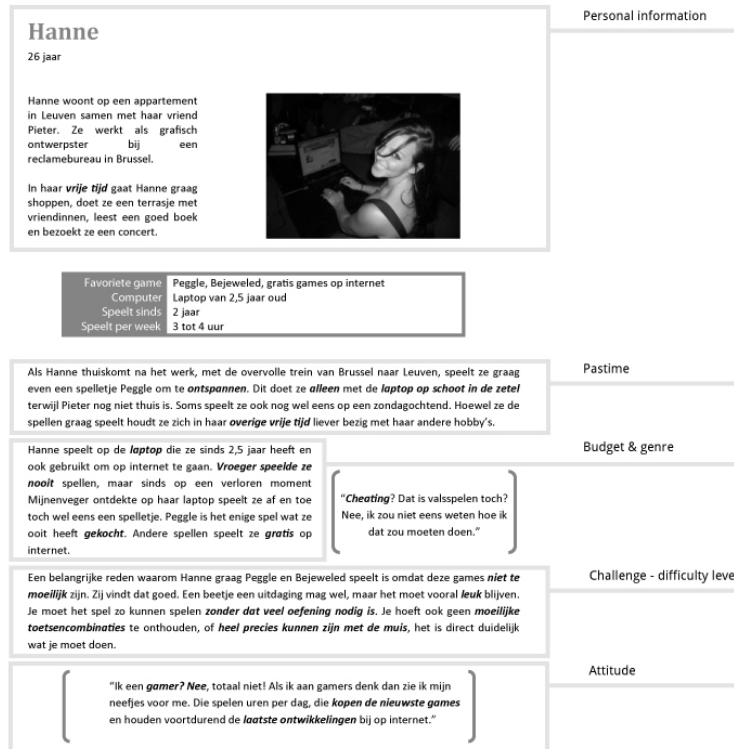
Hanne

26 jaar

Hanne woont op een appartement in Leuven samen met haar vriend Pieter. Ze werkt als grafisch ontwerpster bij een reclamebureau in Brussel.

In haar *vrije tijd* gaat Hanne graag shoppen, doet ze een terrasje met vriendinnen, leest een goed boek en bezoekt ze een concert.

Favoriete game	Peggle, Bejeweled, gratis games op internet
Computer	Laptop van 2,5 jaar oud
Speelt sinds	2 jaar
Speelt per week	3 tot 4 uur

Als Hanne thuiskomt na het werk, met de overvolle trein van Brussel naar Leuven, speelt ze graag even een spelletje Peggle om te *ontspannen*. Dit doet ze *alleen* met de *laptop op schoot in de zetel* terwijl Pieter nog niet thuis is. Soms speelt ze ook nog wel eens op een zondagochtend. Hoewel ze de spellen graag speelt houdt ze zich in haar *overige vrije tijd* liever bezig met haar andere hobby's.

Hanne speelt op de *laptop* die ze sinds 2,5 jaar heeft en ook gebruikt om op internet te gaan. *Vroeger speelde ze nooit* spellen, maar sinds ze op een verloren moment Mijnenveger ontdekte op haar laptop speelt ze af en toe toch wel eens een spelletje. Peggle is het enige spel wat ze ooit heeft *gekocht*. Andere spellen speelt ze *gratis* op internet.

"Cheating? Dat is valsspelen toch? Nee, ik zou niet eens weten hoe ik dat zou moeten doen."

Een belangrijke reden waarom Hanne graag Peggle en Bejeweled speelt is omdat deze games *niet te moeilijk* zijn. Zij vindt dat goed. Een beetje een uitdaging mag wel, maar het moet vooral *leuk* blijven. Je moet het spel zo kunnen spelen *zonder dat veel oefening nodig is*. Je hoeft ook geen *moeilijke toetsencombinaties* te onthouden, of *heel precies kunnen zijn met de muis*, het is direct duidelijk wat je moet doen.

"Ik een *gamer? Nee*, totaal niet! Als ik aan gamers denk dan zie ik mijn neefjes voor me. Die spelen uren per dag, die *kopen de nieuwste games* en houden voortdurend de *laatste ontwikkelingen* bij op internet."

Personal information

Pastime

Budget & genre

Challenge - difficulty level

Attitude

Figure 1. Persona representing a female casual gamer, her habits and gaming preferences, based on the literature (FGI4).

2.3 Procedure

The focus groups were structured in the following way:

Introductory round: First, the moderator and the practical assistant gave a brief description of the main goal of the research project and the focus group interview. Afterwards they both presented themselves, mentioning name, age and gaming preferences. Then participants did the same, elaborating a bit more on the aforementioned themes, with some additional information on their personal gaming history, and which games they usually played.

Persona presentation: After this short introduction, the moderator presented a persona representative for the attending focus group participants.

Individual reflection: After the persona presentation, we asked each participant to reflect for five minutes on what their general impression was of the persona and what the most

resembling characteristics were with themselves. This individual reflection was the starting point for the next stage in the focus group, the actual group discussion.

Group discussion: the group discussion was the main part of our focus group. During the group discussion participants could freely speak and interact with the other participants about the persona that was presented and their view on casual or hardcore gaming behaviour. The discussion followed the same outline as the composition of the persona. With the aid of a slideshow, following topics were discussed: time investment, gaming history, budget, social interaction, challenge, image, game aspects and cheating. Each topic was discussed in group, probing for in-depth insights, the meaning and importance for the participants.

Each focus group interview session took about 120 minutes. In order to adequately analyse the data, the sessions were recorded on video and transcribed.

3. RESULTS

Before discussing the results on the parameters that distinguish hardcore from casual gamers, we first describe the game-related recruitment information of our participants, and the general impression of the procedure of the focus groups with persona-approach.

FG1: Of the 21 participants, seven were selected for the first focus group (FG1), which brought together the typical male 'hardcore' gamers. It concerned mainly PC gamers, with a preference for First-Person Shooters (FPS), and to a lesser extent Massively Multiplayer Online Role-Playing Games (MMORPG's) and Real-Time Strategy (RTS). They all expressed a preference for online gaming, preferably with people they know from real-life. On average, these gamers played 19 hours a week. The maximum hours played by one participant on one day was eight hours.

FG2: In the second focus group (FG2), four female 'hardcore' gamers participated. Contrary to the male 'hardcore' gamers, they preferred single-player Role-Playing Games (RPG's) and to a lesser degree MMORPG's. All of them had ever played Dragon Age: Origins (BioWare & Edge of Reality 2009), three had played World of Warcraft (Blizzard Entertainment 2004),, of which one was still active in the game. The female hardcore gamers played slightly less than their male counterparts, on average 15 hours a week.

FG3: The third focus group (FG3) consisted of five male 'casual' gamers. These participants played race games, sports games, Flash-games (on Facebook) and sandbox/open world games (Grand Theft Auto IV (Rockstar Games North & Rockstar Games Toronto 2008). They played less than one hour a day.

FG4: The last focus group (FG4), consisted of five female 'casual' gamers. Respondents in our sample preferred puzzle games (Peggle (PopCap Games 2007), platform games (Super Mario Galaxy (Nintendo 2008)), music games (Rockband (Harmonix et al. 2007)) and Flash-games. Like the male 'casual' gamers, they also played less than one hour a day.

In the remainder of the results section, we will refer to these participants as (male/female) 'casual' gamers and (male/female) 'hardcore' gamers. However, as this categorization is subject of the current study, these labels should only be interpreted as an indication of average playing time.

Overall, we had a very positive experience with the focus group approach. The personas on the archetypical casual and hardcore gamers facilitated the discussions, as the participants could easily compare themselves with the persona characteristics. In addition, a slide show

was used to zoom in on specific characteristics of the persona. The slideshow was also helpful to structure the discussion, and to assure none of the topics we planned to discuss were left out.

3.1 Time

The discussion on the time effort in gaming is twofold. On the one hand, the time investment in game play versus the available time for game play will be discussed. On the other, the time spent on game related activities is described.

3.1.1 Time Investment versus Available Time

In discussing the participants' time investment, accounting for their total available time, we focused on how much they play; when they play; and why the play on specific moments in time.

Our results show that both female and male gamers from the casual focus groups played most of the time: a) when they have no other things to do, b) because of boredom or c) when there is the opportunity to play together with someone else (family member or friend). In general, our female and male casual gamers showed similarities in reasons for gaming during their pastime.. Playing games is mainly seen as an activity when there is nothing else to do or as a distraction. However, one male casual gamers states:

"Sometimes I try to complete a whole game, in that case I spend a complete week on gaming". (Male, casual)

It is important to consider that if time was being used to discern the latter casual gamer from a hardcore gamer, he could actually be labelled as a hardcore gamer. A similar quote from another female casual gamer illustrates the same idea:

"Sometimes I really keep on playing till I unlock all the songs in Rockband". (Female, casual)

Two of the five participants from our female casual group had the feeling that they played longer than they intended.

The results further showed that contextual factors determine greatly the time investment in gaming. Indeed, the moment of playing differs a lot; as following two participants' quotes indicate:

"When the kids are asleep" (Female, casual)

"I often play when I need a short distraction when I am studying for my exams". (Female, casual)

Another example that illustrates the impact of contextual factors is expressed in two of our female casual gamers. The latter reported that their game behaviour changes from summer to winter; more time is spent on gaming in the winter. Consequently, it should be acknowledged that a casual gamer can become a hardcore gamer for a specific period of time (Juul 2009).. Caution is required in generalizing these findings, as nine of the ten casual gamers in our study claimed that they are not inclined not play more if they had more time available.

In the introduction we told the participants in the hardcore focus groups that they were selected because they played daily one hour or more, on average. This statement provoked a lot of laughter in the group:

"Yeah, I think I, or we play an hour a day, maybe more... [ironic laughter]". (Several males, hardcore)

This quote clearly indicated that many males from the hardcore focus groups play a lot more than what they reported as their average invested time in gaming. Similar as within the casual gamer groups, their time spent on gaming was not as steady as we assumed. For example, the participants from the hardcore focus groups often said to play more during holidays or when they just bought a new game. Social aspects also seemed to have an impact on the moment they play. For example, there is generally more interest in playing games when there are raids –i.e. missions for which a large number of people have to collaborate to defeat a large creature or boss monster; common in MMORPG's- .or simply when there are a lot of friends online. The participants considered gaming as only one part of their leisure activities, so the total available time that could be spend on gaming differed from participant to participant. From the focus group discussions, it became clear that the total available free time mainly depended on occupation and the amount of other leisure activities. For instance, a student or an unemployed person often had more available time than a full time employee. Considering the total available time that our participants could spend on gaming, three of the seven said they would play more if they had more time available. Nevertheless one male hardcore gamer stated:

"I wouldn't play more if I had more time; I would spend it on other leisure activities".
(Male, hardcore)

3.1.2 Time spent on Game related Activities

In what follows the time spent on game related activities will be discussed for the hardcore and casual gamer focus groups respectively. Regarding the time spent on game related activities in the casual gamer focus groups, there was only one female casual gamer who reported being active on a game forum. In contrast, none of the male casual gamers were active on game forums. As for the time spent on buying games, three of our five female casual participants said sometimes visiting a game store whereas the other two mainly reported borrowing games from friends or a family. Among the male casual gamers, only one participant said to visit a game store from time to time. The majority of male casual gamers got their games from other sources than a store: illegal downloads, borrowing from friends/family or looking for freely available games on the Internet.

There was no female participant in the hardcore focus groups who was spending time on game forums. In contrast, the majority of the male participants regularly visited game forums or game related websites. From our data, it became clear that female hardcore gamers had no interest in game forums.

3.2 Budget

In this section, the differences in terms of the money spent on gaming will be discussed for the casual and hardcore gamers respectively.

In the female casual gamers' focus group , there was a great variety in the reported expenses on games and hardware. Some said to play mainly free online Flash-games whereas others were more inclined to buy games for their console or pc. In the casual focus groups, most of the pc gamers played on a dated computer or laptop. Two participants reported that they often check the budget game section in the store because they consider the newly released games as too expensive. One participant bought games for her kids and husband; and meanwhile played the games herself. Overall, the female casual gamers reported to spent less

money on games. In the group of male casual gamers, we found that three of the five mainly got their games through (illegal) downloads. One of them looked out for budget games in the local game store. The majority of the male casual gamers played on a laptop or on a game console.

Considering the female hardcore gamer, most reported to play games on relatively dated hardware, like an old laptop or pc. Only one female had a recent gaming computer, bought by her boyfriend. When buying a game, these participants often said gathered relevant information by boyfriend, siblings or co-players. They were rather inclined to consider older released games because of the price difference compared to the more expensive newly released games. Another argument was that older games run better on their older hardware. One of the female hardcore gamers said to buy her games through Steam, a digital distribution, digital rights management and multiplayer platform from Valve Corporation (Valve Corporation 2010).

Buying games online was a behaviour that was more observed in the male hardcore gamers than the female hardcore gamers. One of male hardcore gamers said he only plays illegal downloaded games. The main reason why the majority of male hardcore gamers was willing to pay, referred to the inability to play online with illegal games. In buying online, the male hardcore gamers were also very familiar with pre-ordering games, which they often did to buy their favourite, highly expected games. Pre-ordering games was a behaviour that was not reported among the casual gamers. In the discussion about hardware, we found that most of the male hardcore gamers had good knowledge of their hardware. They said to be responsible for the upgrades and for buying new parts.

3.3 Genre

As for the preferred game genre, female casual gamers said to favour games such as puzzle games (e.g. Peggle (PopCap Games 2007)), platform games (e.g. Super Mario Galaxy (Nintendo 2008)), music games (Rockband (Harmonix et al. 2007)) and Flash-games (e.g. Wordtwister (Puzzle Baron n.d.)).

The male casual game group rather expressed a preference for other types of games such as race games (Forza 3 (Turn 10 Studios 2009)), sports games (FIFA series (EA Sports n.d.)), Flash-games (on Facebook) and sandbox games (Grand Theft Auto IV (Rockstar Games North & Rockstar Games Toronto 2008)).

All the participants in the female hardcore group liked playing Role-Playing Games (RPG); three of the four had played Dragon Age: Origins (BioWare & Edge of Reality 2009) often. Some of them had played online shooters in the past, e.g. two of the four participants had played Left 4 Dead (Valve & Turtle Rock Studios 2008).

The overall majority of male hardcore gamers played online first person shooters. Examples from our participants were: Call of Duty 2 (Infinity Ward 2005), Battlefield Bad Company 2 (EA Digital Illusions CE (DICE) 2010), Left 4 Dead (Valve & Turtle Rock Studios 2008).

We further observed clear gender differences with respect to the perceived role of the game narratives on the game experience. The male casual gamers reported to favour single-player games with a decent story line, like Grand Theft Auto IV. In the female casual gamers, however, the presence of a minimal story line provided sufficient narratives for an enjoyable game:

"If I know that I'm Mario, and I have to save a princess, that's all I need to know".
(Female, casual)

As for female hardcore gamers, the presence of an elaborated, well-present story line turned out to be an important requirement for a good game. In that perspective, their preference was similar to the appreciation of a story line as revealed in the male casual group. Although the male hardcore gamers did not neglect the importance of a story in games, they mostly played online multiplayer games in which the story is less explicit and hence not perceived as that important as in single-player games.

3.4 Challenge

In literature, it has been described how the success of games greatly depends on the relationship between the game challenges and the gamer's abilities. More particularly, game designers should aim for achieving the right balance between both elements in order to bring the player into a flow state of immersed enjoyable experiences. This implies that the game may not be too difficult as that will cause frustration, but also not too easy as that leads to boredom (Sweetser & Wyeth 2005; Csikszentmihalyi 1997; Bowman & Boyan 2008). The success of games that allow for an optimal balance between skills and challenges was clearly illustrated in the male casual game group. Most respondents in that group reported to enjoy playing the FIFA series (EA Sports n.d.) because of this reason.

During the focus group sessions in the casual game groups, we found a difference in what constitutes an optimal challenge level. Overall, the data clearly indicated a different attitude towards challenge in games. Challenge turned out to be a more important motivator to play (and keep on playing) games in the male casual gamer group than in the female casual gamers. For example, one participant really liked completing a game for 100%, another participant liked playing on the highest difficulty level:

"I like playing on a high difficulty level but I will lower it when it's too difficult". (Male, casual)

The female hardcore gamers differed in their expected game challenge from the female casual gamers. More particularly, the female hardcore gamers considered the progress throughout the game itself as the main challenge. This process did not need to be easy. This contrasts the female casual group who did not perceive challenge as an important motivator and preferred games with an easy to average challenge level.

The female hardcore gamers also greatly differed from the males from the hardcore group with regard to role that achievements play in their game experience. Achievements are a sort of meta-goals defined outside of a videogame. Unlike the storyline or quests, achievements are mostly rewarded for goals that have no immediate consequence in the game; they are also known as trophies or challenges. In the group of female casual gamers, achievements were only appreciated when they were helpful in completing the game. Clearly, there was no emergent need to compare their achievements with friends or other players. To illustrate, one of them played a MMORPG but was not interested in all the statistics the game collected. For her, there was no need to compete in the game; the main story line was the biggest motivation together with the social contact of the group of players who played the online game together, the so-called guild. She said:

"Achievements? Aah, you mean nerd points?! No I do not go for them; some do, but that's silly" (Female, hardcore)

Looking into the results of the group of male hardcore gamers, we found that similar pattern of gender differences in game preferences and behaviour, whereby challenge is an important motivation to play games, and whereby achievements provide additional game enjoyment. Indeed, achievements were often obtained in a goal-oriented way:

"I try to unlock all the achievements, that satisfies me".   (Male, hardcore)

In describing their favourite game genre, the group of male hardcore gamers said to prefer First-Person Shooters because of the skills and precision needed to get in total control of the character and hence be successful in the game. Mastering all the controls of a game was clearly seen as an important challenge. However, the participants agreed upon the necessity of controls that are intuitive:

"If you notice the controls; then there is something wrong!"   (Male, hardcore)

3.5 Competition & Sociality

Both female and male casual players were similar in their attitude towards competition and sociality. There was a general dislike of competition, which they mainly explained as the result of not having spent enough time on gaming to be competitive. For the male casual gamers, the social aspect was not that important at all; only one of the five played online from time to time. The female casual gamers clearly preferred to play with others cooperatively instead of competitively. From that perspective, the female casual and female hardcore game groups did not differ that much, they were all not interested in competing. In the case of online games, they said to prefer playing in a cooperative way with the other gamers. Moreover, in online games, they do not feel the need to compare in-game statistics or achievements with other players. In general, the female hardcore gamers played mostly single-player games, thereby requiring no help or interaction from others. Only one of the female hardcore gamers played online with other people; it concerned the MMORPG player who especially liked the cooperative play of the game.

In contrast, the male hardcore gamers did favour competition in games, and hence they like playing online. They said to prefer ranked matches, game statistics and achievements, which they like to compare with friends. Although they also compare to other players, the competition with friends gained more importance.

"When I see my friends in real life, I like to confront them with their stats from Bad Company 2. It's always fun to laugh with each other!" (Male, hardcore)

Four of them state that social interaction in online games was important for them. For one of the participants, playing online with other friends was a necessity:

"I would never start a game when I know my friends are not online, I really like playing with them, playing alone is so dull". (Male, hardcore)

3.6 Image

The last topic discussed during the focus group interviews, dealt with the image of a gamer. More particularly, they were questioned whether they felt confident with the label "gamer", including whether they saw themselves as a gamer; what the term gamer meant to them and

how their point of view was on gamers. In all focus groups, this topic created a remarkable longer discussion than the previous game-related issues.

Specifically within the female casual gamer group, we noticed that the majority did not consider themselves as a gamer. The main reason was that, as they stated, a gamer plays more often than they do. The female casual gamers did not consider gaming as one of their main pastime activities; and they would not mention it when someone would ask. There was one exception though, one female casual gamer felt that the image of a gamer fitted her profile, particularly because she knew a lot about games and spent al lot of time on game related websites. In generally female casual gamers did not have a negative point of view on the image of a gamers. This was not the case for our male causal gamers, three of the five had a negative opinion towards gamers, one of them stated:

"A gamer is a person who games all day long and has no other leisure activity's"

"A person that games but has friends and sometimes goes to a pub with them is not a gamer. " (Casual, male)

Although none of the male hardcore gamers would mention playing games as one of their hobbies, they all considered themselves as gamers. In general, the majority of the hardcore gamers, both male and female, was proud to be a gamer, and did not hesitate to tell others about it:

"Sometimes my friends laugh with the fact that I'm a gamer, but I know it's to tease." (Hardcore, female)

Only one male hardcore gamer would not come out for it because he was not proud of being a gamer. Nevertheless, he admitted always defending the positive side of gaming and a positive image of gamers in discussions. **Although the majority of hardcore groups were proud to be labelled as a gamer and defended gaming as an important** leisure time activity, the female hardcore gamers were sometimes bothered by the fact that games as pastime for females is not generally accepted by the public as it is for males. As a consequence, some females in the hardcore focus group indicated to play as a male character to avoid discrimination.

4. CONCLUSION

This article aimed at drawing a more coherent picture of the parameters, and the relation between these parameters, that are meaningful in the categorization of casual and hardcore gamers. Special attention went out to the relations between gender and the gaming variables.

We used the parameter of average time spent on gaming to categorize the participating gamers. We noted a number of issues concerning this parameter. Self-reported gaming time may not be very accurate, as it is often subject to contextual factors, and consequently, it should be seen relative to a person's total spare time. The results further revealed that the time spent on game-related activities, such as online discussions, and the money spent on gaming, were related to gender. This meant that we would have had a different categorization when we would have used these parameters. In particular, it would have meant that most of the females who were categorized as hardcore gamers in the current study would have been categorized as casual gamers.

The issues concerning the parameter time, and the relations found between the other parameters and gender, showed that there was no clear line distinguishing the casual from the

hardcore gamer. It provided an argument for the use of a categorization containing multiple parameters, as was already suggested by Ip and Jacobs (Ip & Jacobs 2005).

We also examined the relations between gender and gaming variables concerning the game story, social interaction, preferred game genres, violent content, challenge and competition. As was expected, considering the literature on gender differences and games, we observed a number of gender differences in both the casual and hardcore focus groups. Interestingly, the observed gender differences were not as straightforward as one would expect. Often there was an interaction, meaning that the gender differences were not the same for the participants categorized as casual gamers and those categorized as hardcore gamers. This interaction pleads the case for more attention concerning gender differences in the studies researching casual and hardcore gamers.

In summary, we have raised some issues that should be kept in mind when studying casual and hardcore gamers. The results from this study extend the knowledge on parameters used to categorize gamers as casual or hardcore. They also provide more insight in the relations between gender differences in gaming and the categorization of gamers in casual and hardcore gamers.

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