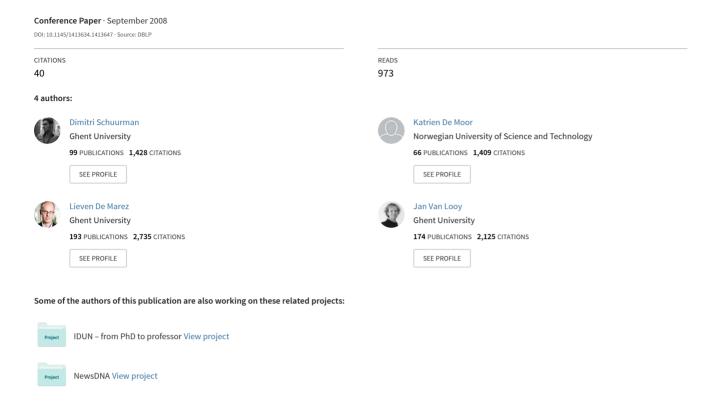
Fanboys, competers, escapists and time-killers: A typology based on Gamers' Motivations for playing video games



Fanboys, Competers, Escapists and Time-killers: a Typology based on Gamers' Motivations for Playing Video Games

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ABSTRACT

In this paper, the different general motivations of gamers for playing video games are explored. Surprisingly, to date little research has been devoted to the characterization of the gamer, based on general game motivations. By means of an online survey, we questioned 2985 Flemish gamers on 11 general game motivations. K-means clustering was used to distinguish four distinctive gamer profiles: the overall convinced gamer, the convinced competitive gamer, the escapist gamer and the passtime gamer.

Categories and Subject Descriptors

K.8.m [Games]: Miscellaneous.

General Terms

Human Factors and Theory.

Keywords

Video games, game motivations, gamer typology.

1. INTRODUCTION

In the media, academia and politics, an increasing amount of attention is devoted to computer games. Despite being a relatively new form of popular culture, gaming has already stirred a lot of debate. The fact that newspapers and magazines publish game reviews next to reviews of more traditional media, such as music and film, indicates that gaming is entering the mainstream. Several trends support this claim: the amount of time that is dedicated to gaming is increasing, the importance of serious games is growing, and gaming is more and more used for educational purposes. Furthermore, due to the success of the

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Nintendo Wii, new gamer segments are being explored. These evolutions have entailed new challenges and consequences: increasingly, the gaming industry is competing with more traditional media industries such as music and movies. With every new medium that rises at the firmament, new questions are raised often leading to controversy. This paper aims to explore the motivations of game players, and more specifically the more hardcore gaming segment, in order to get a more accurate and diverse view on the gaming population.

In the literature, the 'game studies' school and the 'social-psychological' school have focused on video games from a different point of view. Whereas the former has mostly been dedicated to qualitative research in order to establish gaming studies as a research field, the latter can be said to have studied the (harmful) effects of video games in an experimental setting [1]. Within the 'game theory' field, different approaches have continuously competed with each other: a ludology-perspective, a narratology-perspective and different media-perspectives (literary theory, film studies, cultural studies, and digital games as new media) [2]-[4].

Traditionally however, these different approaches tend to focus on the video games in such a way, that an adequate insight into the people playing video games, i.e. the gamers, still seems to be lacking. As a result, all too often 'the gamer' was used as a homogenic stereotype to identify people playing video games. Yee expressed this concern as follows: "Oftentimes, both the media and researchers into media effects collapse all video gamers into a simplistic archetype. While this facilitates making sweeping generalizations of potentially deviant behaviors or consequences [...], this strategy inevitably ignores the important fact that different people choose to play games for very different reasons, and thus, the same video game may have very different meanings or consequences for different players." [5]

Given the lack of such 'player-centric' research, more insight into this matter seems of vital importance to discriminate amongst different gamers' motivations and types. In view of this, this paper presents empirical results from a large-scale study that took place in Flanders, Belgium. No less than 2985 Flemish gamers participated in this study, which aimed to gain a clear insight in

the attitudes, opinions and motivations of people who identify themselves as 'gamer'.

2. GAMER TYPOLOGIES AND MOTIVATIONS

Literature shows that only recently, some academic attention has been devoted to the study of gamers' motivations to play. However, it can be argued that most of these studies remain rather narrow since they tend to focus on online gaming.

Scholars have for example tried to identify the appeal of MUDs (multi-user dungeons), or more recently, of MMORPGs (massively multi-player online role playing games). In this respect, Bartle's typology of users of MUDs was a pioneering work which has influenced most research in this area. Based on two motivational dimensions, he identified four different player typologies: killers, achievers, explorers and socializers [6]. Bartle's typology was criticized by Malliet, who investigated these motivations in a qualitative research setting [7]. He argued that the gamers involved in his study considered Bartle's categories to be too narrow. Furthermore, they felt as if they belonged to several groups, instead of only one.

Moreover, research by Yee revealed that play motivations in MMORPGs do not suppress each other as Bartle suggested [5]. This means that players can display motivations that are associated with e.g. both killers and achievers. Utz on the other hand identified four groups, which are more or less comparable to Bartle's: role-players, gamers, virtuals and skeptics [8]. In addition, Bekhtina's research mentions four motivations for playing MUDs: a) curiosity, astonishment, and interest, b) cognitive stimulation, c) enjoyment of a different life style in virtual environments and d) recreational refreshment [9]. In line with the criticism of Yee and Malliet, these motivations were not seen as mutually exclusive.

In another study by Cole & Griffiths the abovementioned typology (Utz) and motivations (Bekhtina) were used as a starting point for a survey on MMORPGs [10]. The results showed that most respondents identified themselves as 'gamers', while one out of five saw themselves as 'role players'. The 'virtuals' and 'skeptics' appeared to be a small minority. Of the four surveyed motivations, 'enjoying a different lifestyle in a virtual environment' was the most popular, followed by 'attention, reasoning, creativity, problem solving', and 'therapeutic refreshment'. This approach does not see motivations as mutually exclusive, but, oddly, sets the gamer typology apart from the indicated motivations.

A more fruitful approach was adopted by Jansz & Tanis [11]. Their focus was also on online games, but they decided to investigate players of First Person Shooter Games (FPSG). They questioned a bunch of motivational statements and performed a factor analysis on them, resulting in the following motivations: competition, interest, enjoyment, fantasy, social interaction, excitement and challenge. These motivations were related to the socio-demographic variables of the respondents.

To date, however, only few studies addressed the general motivations for game playing. Motivations are assumed to influence media selection, attention, active interpretation of content, and its effects [12]-[13]. In the past, different labels have been used to categorize these motivations. Some of the major motivations for playing video games among adolescents include

the presence of a challenging goal [14], a desire to beat the high score, making improvements and the feeling of having mastered the game [15]. Vorderer et al. state that games, which contain more competitive elements, are more enjoyable [16]. Furthermore, Grodal argues that video games are a tool for emotional control, and that motivations for playing video games include the need to feel in control and in power [17].

Sherry et al. started from these general game motivations, derived from the specific characteristics of games, in order to compose a list of gaming motivations, based on interviews and focus groups [18]. The following motivations where identified: social, competition, challenge, fantasy, identification, escapism, pass time and arousal. When surveying these motivations by means of a Likert-scale, 'challenge', 'competition' and 'diversion' were found to be the top three motivations, closely followed by 'arousal'

However, given all these studies and research conclusions, one important step always seems to be lacking, namely the clustering of these motivations in order to come to a gamer typology, based on these motivations. We believe that by simply surveying game motivations amongst gamers and ranking them based on their mean score, the 'gamer'-stereotype risks to be reinforced rather than differentiated.

3. METHODOLOGY

As we have seen, the aforementioned studies have neglected an important potential. To date, gamers have not been categorized based on their self-reported game motivations, although such a categorization would allow us to look beyond the standard gamer-stereotype and to draw a more nuanced picture.

To this end, we decided to work with an online survey. This choice was also supported by empirical evidence, which shows that the social online activities within this group are increasing (cf. the popularity of online gaming and the boom of gamecommunity websites). Due to the fact that this social activity seems to be centered for a large part on game forums and online game communities, it was decided to post the announcements on all relevant Flemish ones. In addition, an e-mail inviting gamers to participate was sent out. In this e-mail, they were also asked to forward the invitation to other gamers they knew. This way, we composed a snowball sample of 2895 Flemish gamers who filled out the survey completely. Since the invitation was addressed to gamers and posted on game forums, we mainly reached those people who identify themselves as 'gamers' and who are also to some extent active in the wider 'game community'. As a result, the more 'casual' gamer was not reached. Given the fact that this was a web-based survey, one could question the motivation and integrity of the respondents. Past studies have shown, however, that web-based respondents are typically highly motivated because of the self-selection process [10]. Furthermore, anonymity tends to have a beneficial effect on data integrity [5].

In the survey, eleven basic game motivations were presented to the respondents. All of these motivations were surveyed on a five point Likert scale.

'enhance skills': I play video games to enhance my skills

'pass-time': video games are mainly a pass-time for me

'new worlds': I play video games because they allow to dicover new, unknown worlds

'arousal': I play video games because of the arousal they bring

'indulge': when I play video games, I can completely indulge myself

'competition': when playing video games, I want to do better than the other players

'someone else': I enjoy being someone else when playing video games

'social contact': I play video games for the social contact with the other players

'freedom': I play video games because of the freedom they offer me

'challenge': when gaming, I challenge myself to do better

'identity': gaming is a part of who I am

These motivations were abstracted from previous research and completed and validated by a panel of expert gamers during the pre-test of the survey. The survey included various other questions regarding gaming behavior and gaming context and ended with a series of socio-demographical questions.

4. RESULTS

When looking at the socio-demographics, we witness a large overrepresentation of male respondents (96.6%). Studies with a similar approach encountered the same problem [19]-[21]. Given the aim of this study to gain insight in the (social) environment of those people who identify themselves as 'gamers', we can say that this subpopulation of people who consider themselves to be a 'gamer' and who is willing to fill out a survey on the given topic, is predominantly male. However, more research regarding the absence of female respondents seems necessary. In addition, we also encountered a lot of PC- and online gamers. We believe that this is due to the fact that the survey was distributed online, via online game forums and game communities. In absence of representative numbers from other research, we cannot determine whether these results are (large) overrepresentations. However, the large number of respondents and the overwhelming positive feedback the survey received from gamers and other people in the field, strengthen the validity of the results.

Table 1: Mean motivation scores

Motivations	Mean (/5)
indulge	4.01
arousal	4.01
pass-time	3.95
challenge	3.86
competition	3.83
freedom	3.60
identity	3.44
someone else	3.40
new worlds	3.36
enhance skills	3.35
social contact	2.64

Table 1 shows the mean scores for the eleven gaming motivations in descending order. 'Indulge' and 'arousal' are clearly the most popular motivations, followed by 'pass-time' and the two competitive motivations 'challenge' and 'competition'. Perhaps surprisingly, the 'social contact' motivation scores the least and is the only motivation with a mean score below the neutral 3.0.

Subsequently, these results for the eleven motivational statements were analyzed by means of K-means clustering. This technique was performed for different cluster numbers, and the four cluster solution proved to be the most meaningful. Table 2 shows the mean scores for the four clusters in ascending order. The differences between these mean scores are all significant at an 0.001-level, thus providing an additional argument in favor of the external heterogeneity of this four cluster-solution.

- The first cluster is a cluster with high mean scores on all different motivations. Eight out of eleven motivations score higher than 4.0 and only the 'social' motivation scores beneath 3.5 (still 3.35 however). This group of gamers is highly motivated to play video games for a number of reasons. They also consider gaming as a part of their identity. We therefore propose to call this cluster an 'overall convinced gamer' (OCG).
- The second cluster clearly shows the highest scores on the two competitive motivations, 'competition' and 'challenge', and is also characterized by motivational scores above 4.0 for 'indulge', 'arousal' and 'pass-time'. This group seems quite unmotivated to be 'someone else', explore 'new worlds' or be 'social'. For this cluster, we propose the name 'convinced competitive gamer' (CCG).
- The third cluster shows lower motivational scores than the previous two, which makes them 'less convinced' gamers. Not a single motivation scores above 4.0. Most striking, compared to the CCG, are the high scores for the motivations 'freedom', 'someone else' and 'new worlds'. These motivations have a strong escapist nature, therefore we can call this cluster 'escapist gamer' (EG).
- The final cluster has only one strong motivation: 'pass-time'. This last segment is believed to be most closely related to the group of people that was not reached with this survey (i.e. people who occasionally play video games, but do not consider themselves as gamers). Only three other motivations score just above the neutral 3.0, while all other motivations show scores below this neutral value. Gamers within this cluster seem to have no clear motivation for playing video games besides spending some time. We use 'pass-time gamer' (PG) to indicate this cluster.

When looking at the occurrence of these four gamer types within our sample of 2895 gamers, the OCG makes up for one out of three respondents (33.8%). The CCG and EG both account for roughly one out of four (24.7% and 27.2%), while the remaining 14.4% can be labeled as PG.

Table 2: Mean motivation scores per cluster

OCG: 33.8%		CCG: 24.7%	
Ocd. 33.07	Mean/5	CCG: 24.770	Mean/5
indulge	4.54	competition	4.31
arousal	4.38	challenge	4.26
challenge	4.36	indulge	4.10
competition	4.35	arousal	4.05
freedom	4.27	pass-time	4.01
identity	4.21	identity	3.61
someone else	4.20	enhance skills	3.27
new worlds	4.13	freedom	3.24
pass-time	3.88	someone else	2.70
enhance skills	3.84	new worlds	2.67
social contact	3.35	social contact	2.46
EG: 27.2%	Mean/5	PG: 14.4%	Mean/5
pass-time	3.91	pass-time	4.09
pass-time arousal	3.91 3.85	pass-time arousal	4.09 3.37
•			
arousal	3.85	arousal	3.37
arousal indulge	3.85 3.80	arousal challenge	3.37 3.14
arousal indulge freedom	3.85 3.80 3.76	arousal challenge indulge	3.37 3.14 3.05
arousal indulge freedom someone else	3.85 3.80 3.76 3.72	arousal challenge indulge competition	3.37 3.14 3.05 2.94
arousal indulge freedom someone else new worlds	3.85 3.80 3.76 3.72 3.67	arousal challenge indulge competition enhance skills	3.37 3.14 3.05 2.94 2.49
arousal indulge freedom someone else new worlds challenge	3.85 3.80 3.76 3.72 3.67 3.27	arousal challenge indulge competition enhance skills freedom	3.37 3.14 3.05 2.94 2.49 2.34
arousal indulge freedom someone else new worlds challenge enhance skills	3.85 3.80 3.76 3.72 3.67 3.27 3.26	arousal challenge indulge competition enhance skills freedom new worlds	3.37 3.14 3.05 2.94 2.49 2.34 2.13

5. DISCUSSION

As computer games are more and more considered as a new medium with their own distinctive features, the academic field of 'video game research' continues to grow and establish itself. As is the case with most new media forms, a lot of debate and controversy surround these developments. In most cases however, 'the gamer' is used as a passe-partout stereotype to describe those people engaging in the activity of playing video games. Some studies have addressed the motivations of gamers while others tried to set some gamer typologies based on theoretical reasoning. Few tried to ground a typology of gamers on their motivations however.

This paper presented results from an online survey, which was set up in order to overcome this research gap. We were able to compose a snowball sample of 2895 Flemish people considering themselves as gamers. When surveying a list of eleven basic gaming motivations, 'indulge', 'arousal' and 'pass-time' appeared to be the strongest motivations, while 'social contact' was clearly the weakest motivation. When analyzing the results for these eleven motivational statements by means of K-means clustering, a satisfactory solution with four clusters was found:

- The overall convinced gamer is highly motivated to play video games for multiple reasons and considers gaming as part of his or her identity. One out of three respondents belonged to this cluster.
- The convinced competitive gamer is also highly motivated, but for fewer reasons. Competition with others and challenging oneself are the main drivers for this cluster, containing just below one out of four respondents.
- The escapist gamer is less motivated than the previous groups, but scores high on escapist motivations like being someone else, exploring new worlds and enjoying the freedom a game offers. Just above one out of four respondents belong to this cluster.
- The final cluster, containing the remaining 14% of all respondents, is occupied by the pass-time gamer. This gamer type considers gaming to be a nice way to spend some time, but has no other outspoken motivations for playing video games.

These clusters should not be seen as definite, however, but rather as a starting point for further research in this area. Our research has shown that clustering of motivational Likert scales can lead to satisfactory results. Future research could focus on adding more motivational items, leading to a further clustering into smaller groups. It could be particularly interesting to see whether these clusters can be found in other countries as well or whether they are limited to the Flemish gamer. Surveying female gamers and 'lighter' gamers is also of crucial importance for the further understanding of motivations for playing video games. Also, a possible correlation between these gamer clusters and preference for certain game genres could prove fruitful. More insights in this matter will yield interesting conclusions for the role of video games in society and to help establish video game research as an academic field. On to the next level!

6. REFERENCES

- [1] Anderson, C.A., Gentile, D.A. & Buckley, K.E. (2007). Violent video game effects on children and adolescents: theory, research, and public policy. New York: Oxford University Press.
- [2] Rutter, J. & Bryce, J. (2006). *Understanding Digital Games*. London: Sage
- [3] Wark, M. (2007). *Gamer theory*. Cambridge: Harvard University Press.
- [4] Dovey J. & Kennedy W. (2006). *Game Cultures: Computer Games as New Media*. Berkshire: Open University Press.
- [5] Yee N. (2006). Motivations for Play in Online Games. *CyberPsychology & Behavior*, 9(6), 772-775.
- [6] Bartle, R. (2001). Hearts, clubs, diamonds, spades: players who suit MUDs. *Journal of Virtual Environments*.
- [7] Malliet, S. (2007). *The challenge of video games to media effect theory*. Unpublished doctoral dissertation, KU Leuven. pp. 115-7.
- [8] Utz, S. (2000). Social information processing in MUDs: the development of friendships in virtual worlds. *Journal of Online Behavior*, 1(1).

- [9] Bekhtina, V. (2002). Psychological research of MUD gamers. Unpublished master thesis, Moscow State University.
- [10] Cole, H. & Griffiths, M. (2007). Social interactions in massively multiplayer online role-playing gamers. *CyberPsychology & Behavior*, 10 (4), 575-583.
- [11] Jansz, J. & Tanis, M. (2007). The appeal of playing online first person shooter games (FPSG). *Cyberpsychology & Behavior*, 10(1), 135-138.
- [12] Rubin, A.M. (2002). The uses-and-gratifications perspective of media effects. In Bryant, J. & Zillmann, D. (2002). Media effects: advances in theory and research. Hillsdale, New York: Lawrence Erlbaum Associates.
- [13] Haridakis, P.M. & Rubin, A.M. (2003). Motivations for watching television violence and viewer aggression. *Mass Communication & Society*, 6 (1), 29-56.
- [14] Greenfield, P.M. (1984). Mind and media: the effects of television, computers and video games. London: Fontana.
- [15] Morlock, H., Yando, T. & Nigolean K. (1985). Motivations of video game players. *Psychological report*, 57, 247-250.
- [16] Vorderer, P., Hartmann, T. & Klimmt, C. (2003). Explaining the enjoyment of playing video games: the role of competition. *Proceedings of the second international*

- conference on entertainment computing. Pittsburgh, PA: Carnegie Mellon University.
- [17] Grodal, T. (2000). Video games and the pleasures of control. In Zillmann, D. & Vorderer, P. (2000). Media entertainment: the psychology of its appeal. Mahwah NJ: Lawrence Erlbaum Associates.
- [18] Sherry, J.L., Lucas, K., Greenberg, B. & Lachlan, K. (2006). Video game uses and gratifications as predictors of use and game preference. In Vorderer, P. & Bryant, J. (2006). Playing computer games: motivations, responses, and consequences. Mahwah, NJ: Lawrence Erlbaum Associates.
- [19] Griffiths, M., Davies, M. & Chappell, D. (2003). Breaking the Stereotype: The Case of Online Gaming. *CyberPsychology & Behavior*, 6 (1), 81-91.
- [20] Griffiths, M., Davies, M. & Chappell, D. (2004). Demographic factors and playing variables in online computer gaming. *CyberPsychology & Behavior*, 7 (4), 479-487.
- [21] De Pauw, E., Pleysier, S., Van Looy, J., Bourgonjon, J., Rutten, K., Vanhooven, S. & Soetaert, R. (2008). Ze krijgen er niet genoeg van! Jongeren en gaming, een onderzoeksstudie. Research report ViWTA.