Playing MMORPGs: Connections between Addiction and Identifying with a Character

David Smahel, M.Sc., Ph.D., Lukas Blinka, M.A., and Ondrej Ledabyl, M.A.

Abstract

Addiction to online role-playing games is one of the most discussed aspects of recent cyberpsychology, mainly for its potentially negative impact on the social lives of young people. In our study, we focus on some aspects of youth and adolescent addiction to MMORPGs. We investigated connections between players and their game characters and examined if, and in what ways, player relationship to their character affected potential addiction. Players attitude to their characters seems to play a specific role, since players who tend to be addicted view their characters as being superior and more often wish to be like their characters in their real lives. Our research also confirmed that younger players are generally more prone to addiction.

Introduction

Massively Multiplayer Online Role-Playing Games (MMORPGs) are played for much longer periods of time than other games. At the same time, some players tend to consider social aspects of the game world more important and satisfying than social relationships in their real world. Based on this, it would seem easy to consider players of such games addicts, although some authors do not agree with this connection. Some authors claim that we must rather consider the specific approach to the social life of players, which is not and need not be bad in its own right. Whether there is an addiction, of what scale, and eventually, which needs do MMORPGs saturate players with, are thus open questions.

In this article, we focus on determining which players might have a greater tendency for eventual MMORPG addiction, and we analyze the problem of identifying with one’s in-game avatar. The character of our research is explorative as we concentrate on connections between player identification with avatars and potential addiction.

The average intensity of playing MMORPGs is 22.7 hours per week, with about 9% of players spending more than 40 hours a week. Over 60% of players also confirmed that they sometimes spend over 10 hours at a time. Major differences in time and intensity of playing did not emerge between age groups and genders. About 40% of respondents considered themselves addicted, and this number varied among groups. In general, younger players considered themselves more addicted, corresponding with the finding of younger players having a somewhat greater tendency for intensive play.

There is also a positive correlation between the amount of playtime and the flow phenomenon, which leads to addictive behavior. Time spent on the game however is not, on its own, a clear indicator of addiction; it only correlates with flow. We can thus claim that time spent on the game leads to more frequent flow and this leads to a higher potential for addiction.

An individual addicted to the Internet should display the following factors. Salience: when an activity becomes the most important in an individual’s life and dominantly occupies cognitive and emotional processing and behavior; mood change (euphoria): subjective experiences influenced by pursued activity; tolerance: an ongoing process, where experiencing original moods requires larger and larger “doses” of activity; withdrawal symptoms: negative feelings and emotions, that follow the termination of activity or inability to conduct the requested activity; conflict: interpersonal or intrapersonal conflict caused by the carried out activity; relapse: a tendency to return to addictive behavior even after periods of relative control.

Charlton et al. suggest that the criteria of cognitive salience, mood change and tolerance, in particular, cannot be considered the absolute focal categories of computer addiction (otherwise, too many players would fall under the category of addicted). Here we should rather speak of “high engagement,” or in other words, a great deal of interest in a given activity. Instead, behavioral salience, conflicts with players’ surroundings, and relapse are much better indicators of addiction. It should also be noted that a wide range
of authors question the existence of “internet addiction” or “addiction to online games” as a mental impairment.

Yee describes several categories of player motivation for engaging in MMORPGs; the character, though, does not form a category of its own. However, it does closely relate to the “advancement” component (gaining character levels, also related to the “achievement” category), as well as the “immersion” category and “role-playing,” and “customization” (of character appearance, its equipment etc.) categories. The author claims that power and symbols of success are motivators mostly for younger, male players. The “advancement” component was a good predictor of the potential addiction of the player, only preceded by time spent in-game and “escapism” (playing to escape from the real world).

Wolfendale, on the other hand, analyzes the relationship between the player and his character in a more complex manner. The relationship to the character is very similar to the relationship which we have to absent persons, and thus we will henceforth use the term “attachment” to describe the relationship between a player and his in-game character. The game character is similarly absent, or more precisely, unreal, but the feelings towards it are real. A stronger relationship to the game avatar is related to more negative feelings if the character dies or is attacked by other players. Yet, can we claim that a stronger attachment to the avatar may also lead to a stronger attachment of the player to the game?

Method and Sample

The method of data gathering was an online questionnaire, filled in by players during December 2006 and January 2007 on a private web page. Respondents were contacted on web forums dedicated to MMORPGs, as well as in the game itself via in-game server-wide communication. The advertising was done on several big MMORPG servers and was updated over short periods. We aimed primarily at World of Warcraft (46.2% of respondents), Everquest 1 and 2 (33%) players, with other games summing up to 20.8%. The obtained sample cannot be considered representative for all types of MMORPGs. However, we believe that it describes the profiles and characteristics of Euro-American players of fantasy MMORPGs well, since World of Warcraft and Everquest are typical representatives of this type of game.

548 MMORPG participants played in the research, their average age being 25 years and average time spent in-game 27 hours per week. There were 15.4% women in the introduced sample. We addressed players on several international servers and the distribution of players was as follows: 352 from Europe, 181 from North America, and 14 from other parts of the world (Africa, Asia, and Australia).

For the purpose of this research, we have divided players into three age groups which represent specific stages of human development: adolescents (12–19 years)—26.9% of the sample, young (emerging) adults (20–26 years)—36.3%, and adults (27 years and older)—36.8%. These age ranges were chosen in accordance with theoretical concepts which define adolescence as a period occurring approximately ages 12 and 18, but also 20 years of age and older, and also with the “emerging adulthood” concept.

Measures

The questionnaire published on the web pages had a total of 64 items, of which we present the results of 14 items related to potential MMORPG addiction, and 10 items asking about the player’s relationship to his character. The questionnaire was of our own making and each question allowed answers on a scale of 1 to 6. The items of both questionnaires presented here can be found on the Internet (http://www.terapie.cz/materials/mmorpg/mmorpgquest.doc [accessed Aug. 1, 2008]). When creating the part of the questionnaire related to potential addiction, we were inspired by several other questionnaires and also by some of the theoretical results of Griffiths. The 14 presented questions focus on the following factors of addiction: cognitive salience, tolerance, withdrawal symptoms, interpersonal conflicts, intrapersonal conflicts, and also subsidiary criteria of behavioral salience. The last factor, probably falling within several criteria, is the loss of control over the amount of time spent in-game.

We presented 14 questions by factor analysis, which can be found on the web at http://www.terapie.cz/materials/mmorpg/factors-addiction-mmorpg-2007.doc [accessed Aug. 1, 2008]. Three factors have arisen: salience (first factor, Cronbach alpha = 0.77), conflict (second factor, Cronbach alpha = 0.76) and the loss of time control (third factor, Cronbach alpha = 0.73). We have also calculated the overall “Addiction score” value for each player as the average value of the answers to these 14 questions. The addiction score mean was 2.49 (SD = 0.85), Cronbach Alpha = 0.875. In the results part, we present comparison of the three mentioned factors when there are significant differences. We present only the overall addiction score values if the three factors show the same trends.

Results

Younger players had higher scores of addiction, with overall score differences being significant, $F(2, 530) = 16.37; p = 0.000, \text{Eta}^2 = 0.058$. In the LSD post hoc test, only the differences between “27 and older players” and both younger categories (both $p = 0.000$) proved significant. The differences are also significant for all three factors showing similar trends, but the highest differences are in the salience factor $F(2, 451) = 20.43; p = 0.000, \text{Eta}^2 = 0.083$. The LSD post hoc test shows significant differences in the salience factor between all three categories, while adolescents score the highest. We also tested gender differences by $t$-test but there appeared to be no significant differences.

The amount of hours engaged in the game is of course strongly related to the addiction score; here we used the average number of hours spent in-game per week provided by respondents. The correlation between hours per week spent in-game and the addiction score is moderately strong ($r(545) = 0.43, p < 0.001$). Surprisingly, correlations between hours per week in game are higher for salience ($r = 0.40$) and conflict ($r = 0.40$) factors but lower for loss of time control ($r = 0.28$).

We also asked players four questions related to identification with their virtual character (avatar). A total of 26.3% of players agree that their “avatar’s skills and abilities are like theirs, but somewhat greater” (53.4% disagree), and a total of 17.1% of players agree that their “avatar compensates my own skills and abilities” (62.4% disagree). 14.5% of
players believe that “both me and my avatar are the same” (67.7% disagree). The last question asked whether the player possesses the same skills and abilities as his avatar: 18.4% agreed and 62.9% disagreed. Based on these four questions, we have created an “identification” score (Cronbach alpha = 0.80).

According to age, we again found a significant difference between players 27 years and older and both younger categories; player identification in ages under 27 is higher than for older adult players. There is also a significant connection between the addiction score and the identification score ($r(392) = 0.22, p < 0.001$).

We also asked players whether they feel proud or ashamed of their avatar. A total of 65.8% of players agree that “they sometimes feel proud of their avatars” (19.5% disagree), and a total of 13% agree with being ashamed of their avatar (73.4% disagree). Players with a higher tendency towards addiction are usually more proud and ashamed of their virtual character, the correlation between the addiction score and pride being $r(398) = 0.24, p < 0.001$ and between the addiction score and shame $r(399) = 0.30, p < 0.001$. Both shame and pride have the highest correlations with the salience factor ($r = 0.31, r = 0.28$). There is a difference in the conflict factor, while shame correlates higher than pride ($r = 0.29, r = 0.17$). It is interesting that the correlation with the conflict factor is higher for shame. It is possible that pride is felt by a large number of players without difference, whilst shame for a virtual character is more of an attribute of addiction. This could also be related to the fact that a player with a higher tendency towards addiction identifies more with his character; he wishes it could replace his own incompetence, resulting in a higher tendency to feel negative emotions such as shame. This hypothesis would however require further research.

Discussion and Conclusions

MMORPGs are played more intensely than video games, which could also indicate a potential for greater negative effects on players. It turns out that younger players have a tendency towards more intense gaming, apparently leading to a larger threat of potential addiction to the game for them. In our research, we have confirmed that younger players are overall more prone to addiction, although the overall differences only seem to be significant when compared to adults (27 years and over). Furthermore, for adolescents, gaming is of higher cognitive and behavioral salience than for older categories. That could be due to their lower stage of identity development, their sense of self being not so strong, and therefore their attribute games higher value than older people.

In our study, we have also identified the identification with character as a factor influencing addiction. MMORPGs offer some players the option to work on their consistent self. Their progress in this case is, however, not usually transferable to situations out of the game universe. A greater emotional engagement then seems to suggest that the player is “stuck” in the game and that it could be a reality replacement for the player. The attachment of a player to his character, even though originally created as a source of fun and satisfaction, can later become unpleasant, for example, if the character is attacked by other players. In our research we have, however, not confirmed that the relationship between identification with a character and addiction is strong, though we can not underestimate the middle correlation value between shame and conflict. We consider this fact important because it seems to imply that the role-playing character of the game is not the main factor causing eventual addiction. The positive and negative aspects of role playing should, in our opinion, be further researched by quantitative as well as qualitative methods.

Since MMORPGs are a global phenomenon, it should be stressed that our results are not generally valid as our sample consisted almost entirely of Euro-American players. Another limitation of our research relates to the type of examined games: in addition to role-playing fantasy worlds, there are other types of games, for example, games based on creating a world similar to ours (Second Life) and the factors of addiction as well as role playing contexts could be different in such games.

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References


Address reprint requests to:
Dr. David Smahel
Faculty of Social Studies
Masaryk University
Jostova 10
602 00 Brno
Czech Republic

E-mail: smahel@fss.muni.cz