

INTERNET GAMING ADDICTION. REASONS, DIAGNOSIS, PREVENTION AND TREATMENT

ARGIRIS V. KARAPETSAS*, VASILIOS A. KARAPETSAS**, NIKOS X. ZYGOURIS***, APOSTOLOS I. FOTIS****

Abstract

We define electronic games addiction as the excessive and morbid use of electronic games (especially those taking advantage of social networking to become accessible to many users). In cases of addiction, this excessive use tends to interfere with everyday reality and to significantly influence it. Researches on the excessive use of internet structures and the problems it causes appeared as early as the 1989 (Shatton, 1989). The rapid development of the computer science and the improvement of the computer-user interaction can fully justify both the massiveness of the problem as well as the plethora of researches on the issue.

Roles Video games with an international (thanks to modern technology) appeal tend to be considered as the most addictive ones. This games category includes the creation of a virtual world in which each user is represented through a character that acts on a personal or group basis. Such online games are of extreme popularity. According to the latest (2012) report by an entertainment software company, a 72% of American households with an internet connection have at least a member participating in online gaming. Such high rates tend to raise concerns given the fact that online games are scientifically proven to cause among others: psychomotor disorders, desensitization of emotions, addictive coercive behavior, personality changes, depersonalization of the user, learning difficulties, and anti-social behavior.

The current study by the Neuropsychology Lab of the University of Thessaly attempts at studying a group of online gaming addicts as well as at finding ways to detect and treat the addiction. Our presentation's further aim is the collection of data and the creation of rehabilitation programs in the long run.

Key Words: Online gaming, students.

Introduction

. An electronic game is a game that employs electronics to create an interactive system with which a player can play. The electronic device employed can be a computer, a gaming device or a mobile phone. Most users nowadays opt for online gaming while most gaming devices provide direct internet access, a prerequisite for the extremely popular roles games.

It has been claimed that they can serve as a means to obtain knowledge and offer children a means of dialogue in an era of isolation. (Gioutani & Kougiouti, 2006). On the other hand, many opposing views claim that modern online games can cause addiction which in turn leads to depression, isolation and dependency. (Haagsima, 2008).

Current research highlights the problem as well as the immense number of online gaming addicts. (Lemmens, Valkenburg & Peter, 2009). The notion of online gaming addiction is not however completely new. (Keepers, 1990) The omnipresence of computers providing access to online gaming platforms however, tend to increase the problem. Online roles games are considered as the most addictive as they can entertain numerous players simultaneously (Council on Science and Public Health). In this type of games users can formulate the character that represents them throughout the game, rather than choosing among a number of pre-formulated characters created by the game's inspirer. Second life is a good repre-

*Professor of Neuropsychology-Neurolinguistics, University of Thessaly

**Undergraduate Student Department of Communication Systems and Networks, Technological Educational Institute of Messolonghi

***Ph. D Clinic Neuropsychology, University of Thessaly

****Ph. D Candidate University Of Thessaly

sentative of the category. The fact that the game can cause addiction can be proven by the immense number of players. 48 million players were reported on April 2008 many of them admitting that: "Second Life isn't merely a game but a real second life". (Voig, Inc., 2008).

In the initial research of online gaming addiction by Shatton (Shatton, 1989) a sample of boys over 18 was studied (average age = 29,7 years old). Consecutive researches focused on younger ages, the view that excessive online gaming is detrimental for ages below 18 being having already been formed. The average participants' age has been recorded to 29 years old in Australia by Brand, Borchard and Holmes (2009) while a percentage of 8% of the participants were over 55 and 41% of them were women. As for the online gaming frequency, a 22% were daily players, a 35% would "usually play" while the rest were occasional players.

Reasons of online gaming addiction

Aiming at fighting against online gaming addiction, we first ought to locate the reasons causing this addiction. A problem in interpersonal relationships can usually lead to constant occupation with online gaming (Alison, Wahlde, Shockley & Gabbard , 2006). The aggressiveness of our modern era both in school and society can urge children to the creation of virtual world in which they seek for tranquility. Even in the case of violent or intense games, the user can be sure that everything will disappear as soon as they log off their computer, this not being the case in the real world, where violence and tension mostly occurs in an appointed environment. The solitariness and introversion of our epoch which must be attributed to both the isolation and alienation of people and families make children prefer virtual gaming worlds (Caplan, Williams & Yee, 2009).

The reasons of online gaming addiction can also be found among social issues like violence in all forms. In such cases the child's real-life decreased self-esteem is replaced by the increased self-esteem within the game. Children thus opt for the virtual world instead of the real one (Jeong & Kim 2011). Tediousness may also urge children towards the scourge of the online gaming addiction. The lack of a goal to be reached may provoke a feeling of tedium and meaninglessness.

In that case, the goals set by the game designers, combined with beautiful graphics and music tempt users to overestimate the value of this visual world (Chiu, Lee & Huang , 2004).

The teenager's character is not stable. The lack of self-control can trap children into constant preoccupation with their computer with a negative impact on their real life. With narcissism being a distinctive feature of the teenager's character, things can get even worse. Game users will constantly try to improve their success rates and to add more advantages to their virtual character. The line between real and virtual can thus become extremely blurry, with extremely negative consequences (Kim, E. J, Namkoong & Kim, S. J., 2008).

Online gaming constitutes a way to escape from the numerous problems of daily reality, urging students to devote more and more hours to it (Hussain & Griffiths, 2009). What is more, communication among users provided through interactive gaming interfaces can act as a catalyst towards online gaming addiction. In fact, anyone can communicate with anyone whenever they wish and on whatever issue. This communication possibility can easily trap young users with a lack of interpersonal relationships (Beranuy, Carbonell & Griffiths, 2013). The fact is supporting by a 2010 research findings were youth addiction to online gaming rates were significantly higher than the rates of addiction to game with no online communication possibility(Thomas & Martin, 2010).

Online gaming addiction location

To locate the phenomenon of online gaming addiction we first have to locate the distinctive features of the addicts group. Constant preoccupation with the idea of online action is the first sign of addiction. These people may neglect duties, get off deadlines and consider online gaming as a priority for their lives (Keepers, 1990).

Addict behavior is also characterized by a tendency to hide the excessive internet use required to cover their gaming need. A vicious circle of insincerity is created. Students lie to parents that they are studying employees lie to employers that they are working and friends seek for excuses to isolate themselves in front of a computer screen and become alienated from previously interesting activities (Yee, 2006).

Alienation from one's social background –friends or family- is another sign of online gaming addiction. Electronic games are placed on the top of the user's needs hierarchy. In even more acute addiction cases users may develop irrationally aggressive behavior towards anyone trying to limit his daily preoccupation with online gaming (Oggins & Jeffrey, 2010).

Online gaming addiction diagnostic tests

The concern of morbid preoccupation with online gaming is not a recent one for scientific society, for the problem exists some decades now. The more interactive however a game interface is, the easier it becomes to provoke user addiction. The ever-occurring question thus is: "How can a user be characterized as internet addict?". In 2003 Griffiths invented and suggested a seven-question list as an answer to this question (Griffiths & Meredith, 2003). Users are considered to be abnormally preoccupied with online gaming if they get positive answers to four or more answers, the questions being as follows:

- 1) Do you occupy yourself with the game in question on a daily basis?
- 2) Do you occupy yourself with the online game for extensive time spans? (typically 3-4 hours of occupation with online gaming)
- 3) Do you occupy yourself with online gaming out of joy or boredom?
- 4) Do you feel angry, moody or anxious when not occupied with the online game in question?
- 5) Do you limit your social or sports activities to occupy yourself with the online game in question?
- 6) Do you neglect to complete your school tasks in order to devote more time to the online game in question?
- 7) Do you –unsuccessfully try to limit the amount of time you devote to the online game?

Simple indications are not enough to locate online gaming addiction. The online gaming addiction test was created subsequently to the Internet Addiction Test (IAT), a utility locating internet addiction (Young, 2009). This utility includes a number of questions, a positive number in one of which might indicate online gaming addiction.

The test is as follows:

- 1) Do you need to devote more and more time to online gaming in order to experience enthusiasm?

- 2) Do you always think of the online game? (Do you think of the next time you will get online when not online?)

- 3) Have you ever lied to your friends or family to hide the extent of your preoccupation with online gaming?

- 4) Do you feel anxious or irritated when someone tries to interrupt or limit the time you devote to online gaming?

- 5) Have you repeatedly yet unsuccessfully tried to limit or stop your preoccupation with online gaming?

- 6) Do you occupy yourself with online gaming on a daily basis to escape from daily problems or feel alleviated from despair, guilt, anxiety or depression?

- 7) Have you ever risked or even interrupt an interpersonal relationship or your wedding due to constant preoccupation with online gaming?

- 8) Have you ever risked your job, academic progress or professional development due to constant preoccupation with online gaming?

Ways to prevent or fight against online gaming addiction

Prevention is the best solution against online gaming addiction. Given the fact that young people are primarily preoccupied with online gaming, we feel that parents have a major role to play in the process of prevention and rehabilitation. First of all, parents should set a clear time limit for online gaming. The amount of time devoted to an online platform use must be limited by parents exclusively. Moreover, parents should provide their children with occupation alternatives like chances to communicate with their friends or new interests like driving lessons. They should impose such limits despite claims that young people communicate through the internet. Young users should also be urged to relax their eyes after every 20 minutes of computer use. This measure may also discourage them from constant focus on their computer that may alienate them from the real world. A short break after 30 minutes of internet action is simple yet substantial way to fight against addiction. Parents ought however to remove the computer from the child's access space, should any other tactic fail. The removal must be of long duration as a harsh yet unavoidable measure (Griffiths & Meredith, 2009).

Controlled and limited internet use constitutes in fact methods of prevention. The most popular way to fight against online gaming addiction is the Cognitive Behaviour Therapy. The methodology of the aforementioned therapeutic approach is as follows: players examine the emotional motives that led to their addiction, searching also for alternative ways to fulfill such emotional needs (Young, 2007).

Parents should also take care of the content of games chosen by their children. In fact, they would rather discourage them from occupying themselves with military activities games. The specific types of online games are reportedly highly addictive due to the fusion between real and virtual they cause. Discouraging children from such games can prevent future addiction. Young people should also be urged to occupy themselves with activities they are naturally inclined to be good at, as a measure against online gaming addiction. The motive of a distinction in sports or music can impel them to take up new activities and devote time to them rather than their computer screen. The motive of school proficiency must also be activated to ward students off online gaming. Poor performance at school may often be associated with internet addiction tendencies. In this case parents can also activate the motive of eagerness for an academic progress in order to decrease the duration of online gaming and fend the danger of addiction (Griffiths, 2003).

One can nowadays find many online forums (specialists or non) providing support, protection and rehabilitation advice to users. A number of them are only accessible by parents, while others can also be visited by children. What can someone find in such websites (many of them created by online games development companies) is the specialists' advice as well as many deterrent examples of the social problems that excessive internet use can cause. There are also therapeutic programs for online addiction rehabilitation. Such programs, developed in countries like Holland and South Korea incorporate family support using also all social skills of the user (Griffiths, 2007).

Motivational Interviewing is an alternative method that can help rehabilitation. This method borrows strategies from Cognitive Behaviour therapy. It provides advice taking advantage of systems theory and the social psychology of persuasion. Motivational Interviewing works in parallel to ambivalence creating a feeling of inner commit-

ment to change and rehabilitation (Miller & Rollnick, 1991).

Online gaming addiction can indistinctively cause problems to teenagers and their social background. The result of such an extensive internet use is the user's gradual alienation from real life. The entire world is replaced by a virtual reality neglecting all commitments that constitute a prerequisite for further advance and academic progress. Thus, the confrontation of the problem is not essential only for the addicts' rehabilitation. It also manages to successfully and gradually incorporate in society the power of active teenagers, previously consuming their energy in a virtual world. The current study is part of a wide attempt to confront the problem of internet addiction and support both teenagers and their families. The study takes place in the Neuropsychology Lab of the University of Thessaly.

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