THE COMPUTER DEPENDENCE IN ADOLESCENCE

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Abstract:
The virtual world created by the computer (games, internet) departs the children from the actual world. Through games the adolescents interact with simulated characters and different creatures and through the internet they assume different identities in interaction with strangers. These make that the limit between reality and virtually world no longer be clear in adolescents. Internet games reinforce the integration of virtual life. The authors present their research on two sample of 20 adolescents to investigate the youth personality differences between those who use the computer or play video games more than 20 hours per week and those who use it less than 20 hours per week. The results and the discussion on these findings are presented in the paper.

Key words: computer dependence, adolescent, personality changes, virtual and real world

Theoretical frame
The term of computer dependence was firsts used by M. Shotton in 1989 in her book Computer Addiction, although the concept has been discussed much earlier by Nicholas Rushby. In his book An Introduction to Educational Computing, published in 1979, Rushby points out that people who become dependent on computer may have withdrawal symptoms. The first warning signs of computer games or internet addiction were drawn early 1980s. Computer addiction is a relatively new term introduced to describe the dependence on a computer, not just of the personal computer but of video games and internet and has many names: cyberaddiction, cyberholism, netaddiction, netaholism, Pathological internet use (PIU).

There is not yet a definition with which to operate and no precise nosological classification of computer addiction. It may seems surprising, but almost all human activities - such as work, food, sexuality, accumulation of material values, setting records, use of drugs, alcohol and other drugs can
take a dependency features. Addictive behavior is realized at some point as a more serious problem for themselves or others, but they still not giving up on it. In this regard, there is a similarity with other obsessive behaviors which may extend to damage the human dignity. There are changes of personality traits, but they occur in an insidious way and can go unnoticed for long. For example, the addicted behavior can push a man to self-deception and lies because the concerned person needs an intricate system of explanations for not losing his self-respect and the respect of others. Company values, freedom, self-determination and self-fulfillment of social functions and health, as long as they are respected is very difficult for someone to observe a pathological behavior (Gentile, 2009).

The international classification of diseases use currently the expression of dependency syndrome and provide clinical diagnostic criteria. If they are meet at least four of the six criteria than is identified the dependency syndrome, namely:
- the persistence of an intense desire to use the computer;
- difficulty of controlling the own behavior;
- functioning disorders, including the neglect of the pleasures and interests;
- danger to himself.

The remaining two criteria refer to signs of withdrawal and tolerance. It follows from here that four of the six criteria are related to compulsive character. This remains an essential component of the dependence syndrome. The DSM IV TR uses the expression "substance dependence" instead of addiction. A number of American professional organizations (American Pain Society, American of Family Physicians, American Society of Addiction Medicine and the Federation of State Medical Boards) prefers the term addiction instead of dependence because it makes a mor clear distinction between physical dependence and compulsive use. In 1957, WHO experts introduced the terms of "physical dependence" and "psychological dependence." The latter is reflected in the abstinence syndrome.

The physical dependence is manifested as a pathological state consisting of the organic need to use alcohol / drugs to avoid disturbances arising from cessation of use. It not occurs in all types of drugs, but occurs more frequently in alcohol and very quickly in heroin and morphine. There is a series of physically unpleasant phenomena called withdrawal phenomena.

The psychological dependence is manifested by behavioral changes and a particular mental state accompanied by the psychological imperative desire to consume alcohol (or to administer drugs) periodically or continuously to achieve a state of wellbeing or to remove the psychological discomfort. This dependence appears to all types of drugs used, including alcohol and those addicted to computer. These use the computer either to
regain pleasure or to avoid anxiety, restlessness, irritability, insomnia, depression, which are the withdrawal state main characteristics.

A typical wrong attitude of the future dependent exist long before the onset of the illness. To produce addiction, not the substance or the computer that sit practically to all people disposition is crucial. It is decisive the decisive boost of a person to use himself this substance to achieve certain effects.

The discussions about the mechanism by which the individual becomes dependent, in one way or another, involve one of the following assumptions:

- the hypothesis of a similar mechanism to the substance dependence.
- the hypothesis of a mechanism similar to the impulse control disorder.
- the hypothesis of similar mechanism to the disease "secondary" to other psychiatric "primary" disorders.

After the performed activities, computer addiction could have several forms:

- gambling addiction (persons who play continuously for hours without a break);
- dependence on chat (multiple accounts, several programs, including the use of mobile devices);
- internet browsing (in this category would be included also the "Internet addiction disorder" or internet addiction).

A person addicted to computer function of age, could realize that a mix between games, web browsing and chat.

About 90 percent of teenagers play video games and 15 percent of them, or more than 5 million children could be addicted. American researchers argue that these addictive behaviors are more common in children who start playing video games at a very young age. Those which often create dependency are those online, multiplayer, say the experts (Brown, 1991; Ferguson, 2007).

**Research**

We conducted a personal research, in which we planed to investigate personality differences to the adolescents who use the computer or play video games more than 20 hours per week (group A) and those who use it less than 20 hours per week (group B).

To achieve the objectives and verify the assumptions made were used two personality scales: Strong Personalities Questionnaire (SPQ) and Eysenck Personality Inventory (EPI).

**Results and discussions**
The results of the two groups of subjects from EPI are shown in Figure 1.

![Bar graph showing results of EPI tests for gamers and non-gamers.]

**Fig. 1.** The EPI results for the two groups of subjects

where:  
s-i = emotional stable, introverted  
u-i = emotional unstable, introverted  
s-e = emotional stable, extroverted  
u-e = emotional unstable, extraverted  
equil. = balanced

The vast majority of the subjects of the lot A show an euphoric mood most of the time and do not make any worry. We believe that the concern for the computer and the games is their only concern and they live in a world apart (that of the game) where the everyday worries have no place. In the group B the subjects have no activities that keep them focused on a work (computer) and thus have more time to think about the problems and worries of everyday life.

According to the international studies, we were able to consult, in treating this subject, playing on the computer for more than 20 hours a week can lead to addiction and especially addiction to game. In the game, the individual can find all the qualities that he have not in the real life: to be strong, to have decision making capacity, to have the right of life and death over other celebrities. Winning the game leads to increased self-confidence and a more positive self-image (Olson and all, 2007).

Those who play on the computer more violent games (group A) are less compassionate because they are exposed to virtual violence. The adolescents from the Lot B are not subject to intense virtual violence and are more careful with their peers and others people around hem.

In the Lot A subjects are more impulsive, reacting quickly to stimuli, they may have low self-control due to the influence of games that require a
high reaction rate. Group B subjects are less impulsive, more balanced because they have a normal life style and more diversified activities.

To both groups of subjects the degree of resistance to stress, the frustration of everyday problems are approximately equal.

The subjects from the Lot A are impulsive and will always be in the spotlight and impress the others. This demonstrates the influence of video games because they make the subjects to become more competitive and self-confident. The subjects from the group B say they are not capable of anything when provoked. They are more balanced, and more reluctant calculated. One can see the seriousness with which treats each task.

The results of the two groups to the Strong Personalities Questionnaire are presented in the figure 2.

![Figure 2](image_url)

Figure 2. The results of the two groups of subjects to the SPQ
where: dem =demonstrativity
intemp. = intertempered
exalt. = exaltation
anx. = anxiety

In the group A we deal with individuals capable of change that can easily adapt to new situations, open-minded and see the opportunities in any new circumstances. The group B contains people who are not ready to accept changes, while the people are steadfast and analysis more detailed the things and not soar into the new situations.

The group A consists of both impulsive which react without thoroughly analyzing things and the people more balanced. The group B subjects are more balanced and less impulsive than those in the group A.

The young people who are more likely to become addicted to computer games are those who spend a lot of hours in front of PC, have problems in socializing with other adolescents and are more impulsive than others of their age. Becoming addicted to games, the adolescents are prone to depression, anxiety or other social phobias. Also, young people who live just to play on the computer have school performances much weaker.

Often the addict person hide himself from the eyes of the family because there is a verbal or emotional pressure that gives discomfort. They
prefer to avoid the criticism and then they go to the game establishments. Often patients come to therapy when they face family pressure or threats of divorce, for example, but when fit together, there is a new relapse, said Griffith and Meredith (2000).

Most video games are free and available online. Some are considered instructive, fun and harmless. Some games teach geography or how to fly a plane. Other helps the player to develop logical thinking and ability to solve problems. Some games are designed to exert a therapeutic effect on the player. For example, a game has been designed to help those who suffer from a disorder of reading. Also other games helps children to become familiar with computer language, language increasingly important in this era of technology. A category of online games have themes that defy social norms, issues such as violence, sex and bad language says David Walsh, the president of National Institute on Media and the Family. Unfortunately, it is the category that seems to have a special pass among children between 8 and 15 years.

Grossman argues that violence in computer games has the same effect on the child as the military training on soldiers, that makes them overcome their instinctive aversion to the act of killing. Violent games develop to children the skills and the desire to kill.

Conclusions

Among other somatic effects on adolescents (such as obesity, eye problems) appear also psychological effects that have a strong impact on adolescent personality. Violence presence in online games can be even more dangerous than the one presented on television or movies because the player identify himself with the characters who exhibit violent. If by using the TV the adolescents are the spectators to violence, the computer games make them even participate in it. Moreover, a movie can hold an adolescent just a few hours, while a video game can kidnap hundreds of hours from the adolescents life.

The prolonged use of the computer may cause emotional disorders: anxiety, irritability, low frustration tolerance, to depression. People who use excessively the computer are irritable, have a low frustration tolerance, are in a constant inner tension, dominated by impatience and restlessness. The computer acts as a means by which they shall discharge these inner states, but also it enhances them by their negative effects on health. These people are more shy, show physical discomfort, insecurity, vulnerability, irritation.

The dependent behavior push the man to self-deception and lies because the gamers require a complicated explanation for not losing their self-respect and the respect of others.

Bibliography:


