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## PSYCHO-PEDAGOGICAL ASPECTS OF THE INTERNET ADDICTION

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### **Abstract**

More and more people take advantage of the Internet for professional, educational and distraction reasons. However, an excessive usage of online computer service (over 40 hours a week) can have negative influence on human mental condition. Internet addiction appears to be a relatively common behavioural addiction that involves the following four components: excessive use; withdrawal, leading to feelings of anger, tension and/or depression when the computer is in-accessible; need for more advanced computer equipment and software and/or more hours of use; and negative social repercussions.

Today there is a great necessity to arrange strategies and methods in order to train the individual to fight his own resistance to change, in order to harmonize the variations that life presents positively and constructively, in order to view identity crises in an integrative way and not in a destabilizing way. This means that the educative task is to guide development, to strengthen and upgrade the individual's ability to understand and choose with the aim of becoming active protagonists in their own lives and not only in life on screen.

*Keywords:* Internet Addiction Disorder (IAD), risk factors, educational task

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### **1. Introduction**

An amazing invention of the 20<sup>th</sup> century, the internet has brought a new dimension to human communication, making human work more efficient and having many attractive features, such as: anonymity (equalizing social status, manipulation of own identity), comfort (retrieving information, socializing with other people or making financial transactions without leaving home) and low usage cost.

More and more people take advantage of web sites for professional, educational and distraction reasons. However, an excessive usage of online computer service (over 40 hours a week) can have negative influence on human mental condition. Many people find themselves unable to control the frequency or amount of some behaviours that used to be harmless, like: love, sex,

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gambling, work, internet and chat room usage, shopping or exercise. And the number of individuals which are affected by different behavioural addictions is increasing every day.

“Behavioural addictions are considered impulse-control disorders and share many underlying similarities to substance addictions, including aspects of tolerance, withdrawal, repeated unsuccessful attempts to cut back or quit and impairment in everyday life functioning “[1].

Many studies indicate that a great part of people with addictive behaviours also suffer from underlying psychiatric problems that must be identified and treated. In such cases, treating the addiction alone (and ignoring the depression or other underlying psychiatric problem) might temporarily resolve one particular addiction, but the patient will often develop problems in another area. For example, a person who is obsessed with spending time on the Internet, while ignoring her children and her spouse, may eventually learn to stay away from the Internet. However, if the underlying problem that caused this addiction is not identified and dealt with, she may then develop another compulsive problem such as gambling or compulsive overeating. For this reason, both the addiction and any accompanying emotional disorders need to be addressed [2].

To determine the cause of addictive behaviours in general or of one person’s addiction in particular it is not so easy. “Emotions, experience, genetic factors, educational levels, intelligence levels - and a myriad of other factors - affect how people view situations and react to them. Thus, there are no overnight cures for addictions. It may take months or even years to recover from addictive behaviours and/or psychiatric illness. It is also true that some people can recover from some addictions without therapy; for example, most people can quit smoking without seeing a mental health professional”. [2, p. IX]

The term ‘Internet Addiction Disorder’ was first used by Young, who described Internet addiction as an impulse-control disorder which does not involve an intoxicant [3]. Young listed diagnostic criteria for Internet addiction similar to those for chemical substance dependence. However, Internet addiction is not classified as a diagnosis in the Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> edition (DSM-IV) and there is no standardized definition of Internet addiction [4].

Internet addiction appears to be a relatively common behavioural addiction and is comprised of at least three subtypes: excessive gaming, sexual preoccupations and e-mail/text-messaging. All share the following four components: excessive use, which may be associated with a loss of sense of time or a neglect of basic drives; withdrawal, leading to feelings of anger, tension and/or depression when the computer is in-accessible; tolerance, including the need for more advanced computer equipment and software and/or more hours of use; and negative social repercussions. Risk factors for internet addiction have been reported to include age and age of first exposure to internet use, accessing the internet for the purposes of gaming, social factors, having internet access at home, male gender, university level education and unsatisfactory financial situation [1].

Excessive internet use is considered by several studies an impulse-control disorder that does not involve, but does share characteristics of, substance dependency. These include: “salience (a preoccupation with the activity which dominantly occupies cognitive and emotional processing and behavior), mood modification (e.g. euphoria), tolerance (an ongoing process in which larger doses are needed progressively), withdrawal symptoms (tension, anxiety, depression, irritability), conflict (arguments, deception, social isolation and disintegration) and relapse” [5].

According to the statistical data, the number of computer addicts ranging from 6 to 70 years of age reaches approximately 5 million in the USA. The official European computer addict statistics lag behind. However, the data are supposed to be underestimated, because the addicted persons rarely look for specialist counselling. Currently in Russia there are only approximately 40 million of internet users, whereas there is over a billion of them worldwide. According to the latest reports 10% of them is Internet-addicted. The studies performed in Russia show that 4-6% of Internet users are Web-addicted and they are usually between 16-25 years of age. Despite the fact that IAD has not been officially classified in DSM-IV, the problem exists and is growing serious. In Poland first cases of Internet addiction were recognized in 1996 [6].

## **2. Risk factors for the internet addiction**

Many studies show that the adolescents are more vulnerable to Internet addiction because they have less ability to control their enthusiasm for Internet activities. Adolescents with Internet addiction may be trapped in their own cyber world, neglect other creative activities, and finally destroy their real-life relationships. Internet addiction is associated with poor mental health status, and low self-esteem in adolescents. All the research findings indicate that it is necessary to identify adolescents with Internet addiction as early as possible [7].

The risk factors for the internet addiction, identified in several studies are: social context, depression, low family monitoring, high family conflict, low connectedness to school and friends with habitual alcohol drinking.

**Social context** is an important influence on adolescent health, the family, peer and school contexts being among the most critical. Many studies have revealed that high family conflict and low family function increased the risk of Internet addiction in adolescents [8].

Meanwhile, given that common Internet activities for adolescents are characterized as being without predefined stopping points, low family monitoring increases the risk of adolescent Internet addiction [9].

In most of the studies **depression** had the most powerfully discriminative effect on Internet addiction in all gender- and age- specified groups. Kraut *et al.* reported that Internet use results in negative effect on psychological wellbeing [10]. Adolescents with depression may experience the pleasure of control and respect from others on the Internet, which may compensate for imperfection in real life. If depression was not well treated, however, they would spend more

and more time on the Internet and progress to addiction [9].

**Low family monitoring** was another discriminative factor for Internet addiction. Internet activities usually provide the pleasure of control, innominate interaction with others, and perceived fluidity of identity for adolescents. Online games and online chatting usually have no predefined stopping points and without effective supervision and discipline in the family, the nature of the Internet activities described here will attract adolescents excessive engagement and increase the risk of development of Internet addiction [11].

Another discriminative factor for Internet addiction was high **family conflict** in non-depressed young girls and boys who perceived high family monitoring. Ary *et al.* have reported that families with higher conflict have lower levels of parent-child involvement, which would result in inadequate parental monitoring, which would predict, in turn, adolescents being predisposed to Internet addiction [12].

Furthermore, social control theory suggests that, when adolescents are close to their parents, they feel obligated to act in non-deviant ways to please their parents. Thus, adolescents with higher conflict with parents would refuse to conform to the supervision of parents, including rules set for Internet use. Also, perceiving high conflict in the family, adolescents may seek social support from interactions on the Internet [9].

Unfortunately, heavy Internet use by adolescents usually results in further conflict with their parents, which may make the problem of adolescent Internet addiction more difficult to resolve. It is noteworthy that the discriminative effect of high family conflict on Internet addiction was found only in young adolescents, which indicates that the stage of chronological development may play a role in the association between high family conflict and adolescent Internet addiction [9].

**Low connectedness to school** could discriminate between those with and without Internet addiction among the non-depressed old girls perceiving high family monitoring. Internet addiction might destroy adolescents' daily schedules and reduce total sleep time by substituting for it, which might reduce the responsiveness to school affairs. Adolescents with lower connectedness to school might receive less support and admiration from the real world, which might make them look for support and admiration in Internet activities. Both, Internet addiction and low connectedness to school might be the results of a chaotic lifestyle of adolescents [9].

Among the non-depressed young girls perceiving low family monitoring, **having friends with habitual alcohol drinking** was another discriminative factor for Internet addiction. Adolescent Internet addiction and substance use have been found to occur together frequently.

**Residential background** could discriminate between the adolescents with and without Internet addiction. Compared with those living in urban areas, adolescents and parents living in rural areas might have less access to information on the adverse impact of excessive Internet use and the necessity to control Internet-using behaviours, and adolescents would have fewer kinds of

entertainment in their leisure time, apart from Internet activities [9].

### **3. Symptoms of Internet Addiction Disorder**

The symptomatic behaviour of Internet Addiction Disorder includes: “interpersonal problems or problems at work or with study, neglecting friends, family and work or personal responsibilities, withdrawal when away from the Internet, irritability when attempting to stop using the Internet, staying online more than originally intended, lying or concealing how much time is spent online, drastic lifestyle changes in order to spend more time online, a general decrease in physical activity, disregard for one's health as a result of Internet use and sleep deprivation or a change in sleep patterns in order to spend time on the net” [13].

With Internet addiction, people not only behave differently from what society would consider ‘normal’, they also think differently from the average individual. They have obsessive thoughts about the Internet, diminished impulse control and feel as though the Internet is their only friend. There is the feeling that the Internet is the only place where they feel good about themselves and the world around them [13].

Kimberly S. Young a psychologist and a world expert on internet addiction who founded the Center for On-Line Addictions (COLA) in 1995, classified people as Internet-dependent if they have displayed four or more of the behaviours listed below during the past year:

- Feeling preoccupied with the Internet or on-line services and thinking about it while off line;
- Feeling a need to spend more and more time on line to achieve satisfaction;
- Inability to control your on-line use;
- Feeling restless or irritable when attempting to cut down or stop your on-line use;
- Going on line to escape problems or relieve feelings such as helplessness, guilt, anxiety or depression;
- Lying to family members or friends to conceal how often and how long you stay online;
- Risking the loss of a significant relationship, job, or educational or career opportunity because of your on-line use;
- Continuing use even after spending too much money on on-line fees;
- Going through withdrawal when off line, displaying symptoms such as increased depression, moodiness, or irritability;
- Staying on line longer than originally intended [14].

A British psychologist, Mark Griffiths studied ‘Internet addiction’ by comparing clinical examples with established definitions of addiction. Griffiths used a fairly traditional definition of addiction which involves the following features:

- Salience: the activity or drug becomes the most important activity in a person's life;

- Mood modification: feeling a buzz or high, or feeling numb or tranquil;
- Tolerance: Increasing amounts of the substance or activity are needed over time to produce the same euphoric effect;
- Withdrawal symptoms: unpleasant feeling states which occur when the substance or activity is removed;
- Conflict: Interpersonal conflict because of the substance or activity, and intrapersonal conflict within the individual;
- Relapse: the tendency to repeatedly revert to earlier pathological patterns of use, and for the most extreme patterns of use to be quickly restored after many years of control or abstinence [5].

#### **4. Types of excess use of the internet**

In The Encyclopedia of Addictions and Addictive Behaviours [2] are several key types of excessive uses of time on the Internet presented. They largely fall into the following categories:

##### ***4.1. Cybersex and pornography***

The largest category of abusive use of the Internet is the perusal of sex Web sites and chat rooms. Some individuals become addicted to the consumption of Internet pornography to the extent that they ignore real-life sexual opportunities with their own partners or other individuals that they know, instead seeking virtual liaisons with strangers online.

They may engage in chat room communication and may masturbate in front of their computers to the point of orgasm, rationalizing to themselves that since the other party is not physically present, it cannot be considered to be 'real' sex. However, sometimes these online encounters progress further to phone sex and/or then to true sexual encounters. Mental health professionals disagree on whether virtual sex is a betrayal of marital intimacy. In contrast, some family law attorneys believe that this activity should be legally defined as infidelity [2, p. 145].

##### ***4.2. Changed relationships over the internet***

In present day society, relationships are more dependent on technology, in particular on telematic technology, at different levels of application and, even though it may seem obvious, it is necessary to remember that the current age is the age of Internet [13].

Many people meet others on the Internet through shared interests or hobbies. Dr. Gwinnell wrote in her book, *Online Seductions: Falling in Love with Strangers on the Internet*, "It is clear that for many people Internet relationships can provide experiences of intimate communication, intimate connections that are not available in face-to-face interactions in daily life. To some degree it's simply a matter of numbers as millions of people take to the

Internet, joining online services and sending messages, their opportunities to get to know one another increase exponentially. No other place, outside school, allows so many people to meet on common ground. With *millions* of people leaving notes for each other in cyber-space, friends (and enemies) are made. Some people find love, some find sex and some find the intellectual stimulation they haven't had since midnight conversations in the campus coffee shop". [15]

Many people wonder how strangers can become attached to each other over the Internet. One key reason is because of the false sense of intimacy and the breaking down of boundaries and barriers that the medium of the Internet achieves. As described by Dr. Gwinnell in her book, a key element in the unique medium of the Internet is that the normal screening by all the senses is absent. Individuals cannot see, hear, or touch each other [15].

Unless individuals provide valid photographs of themselves, as they often fail to do, the only way to evaluate each other in chat rooms or other areas where individuals meet is through the words that they share. As a result, individuals may begin to imagine and to attribute desirable qualities to the other person with whom they are communicating. Later, if they decide to meet, the emotional investment they have already made may have become a major one to the extent that they are almost pre-programmed to like or even love each other. Some individuals married people they meet online, although whether these relationships are lasting is unknown [2, p. 145].

#### **4.3. Gaming**

Some individuals are fascinated by role-playing games that can be played online. It can be a rush for a mild-mannered accountant to play the role of an aggressive warrior or other completely different person from the daily life of the individual. Sometimes this alternate identity can become a very powerful person that becomes extremely important to the individual and the role-playing and gaming is addictive [2, p. 145].

#### **4.4. Compulsive shopping**

Some users are mesmerized by eBay while others love to search the Internet for many different shopping sites. Some compulsive shoppers move from link to link. They may gain a feeling of power and control from clicking and ordering items to be shipped to their home [2, p. 145].

### **5. Social impact and societal dangers of the internet**

In 1999 Orzack [16] has evaluated 'Pathological Computer Use Disorder' in terms of the computer being utilized as a means to satisfy, induce excitement, and reduce tension or induce relief.

Kraut et al. [10] demonstrated in a 2-year prospective study of 169 people in 73 households in the Pittsburgh area that there was an association between increasing use of the internet and withdrawal from family activities, increases in depression, and feelings of loneliness.

The internet can also provide a medium for creating false senses of interaction [10]. Therefore, increased internet use may cause individuals to become isolated from their peers and from social interaction.

Actually, the identity concept has been modified just as the community concept has. Being a member of a social group is no longer determined by the sharing of places and physical borders; individuals who surf the net, cyberspace citizens, are the main participants in this reality. Cyberspace and the physical world are not two detached realities, but are factors which directly influence each other [13].

Cyberspace appears to be a new arena where interactions and dialogues can be recorded and observed in real time and where everyone can show himself or not. In the world behind the screen the differences disappear and the freedom of self expression and performance depends totally on the individual and not on cultural, ethnic and religious identities. The world on line offers various types of dialogue: electronic mail, chat rooms, deferred dialogues of interest groups, newsgroups and the environments of MUD (Multi User Domain). These changes involve two very important pedagogical points: the *identity of self* and the type of *social relations* that can be established in a telematic environment [13].

As the popularity and convenience of the internet grows, so do the concerns for its possible abuse. Feldman reports on a series of cases of ‘virtual’ factitious disorder and Munchausen reports by proxy in which internet group users gave false personal stories about an illness or crises and cautions physicians who participate or have patients that participate in online forums to be aware of pitfalls of this technology. Although Feldman points out the significant benefits that internet groups can have for patients, he also describes that this new medium has made it easier for individuals to mask their true intentions [17].

## 6. Conclusions: pedagogical tasks

All school staff including teachers, nurses, and other health care providers working in junior or senior high schools should pay closer attention to students who show intermittent addiction and addiction to the Internet.

“Health education for Internet addiction prevention should offer information about Internet addiction symptoms and associated factors. Counseling might also be helpful when it is anonymous. In addition, multimodal interventions would be required to provide counselling services rather than a single type of intervention such as parent intervention or school intervention as the severity of Internet addiction progresses. Further study needs to develop preventive and treatment programs according to the severity of Internet addiction”. [18]

Internet Addiction Disorder is certainly a worrying concept which deserves adequate scientific research and expert attention. However, we must take care not to form rigid patterns and generic classifications. “IAD disturbance should be observed and understood through a constructivist approach while bearing in mind the features of the context and subject which is under consideration. In the same way, the actions of care and prevention of the problem must be organized holistically and with due consideration paid to systems of interaction which surround the subject (family, society, work, peer groups, cultural systems etc.)”. [13]

An impressionable number of reviews, documentation, research and detox centres, validated services of support for families, tests and questionnaires have been produced by specialists in many countries, all over the world; the collective effort in the study of this problem is being directed towards the idea that dependency on the net is a compulsive disorder worthy of entering future editions of the DSM.

Most of the research that has been carried out has concerned areas of Psychology or Sociology. But it must be also a pedagogical approach of this problem. This means that the study of IAD must be carried out according to all aspects which define the identity profile of the subject. [13]

What is task of the teacher faced with such a problem? What are the subjects at greatest risk? What can be done? These are just some of the open pedagogical questions which should be considered by further research.

Like other types of dependency, Internet Addiction is also caused by problems involving the development of personal identity. The weakness of personal identity, which clashes with social reality, can be a reason for which the user sees the world on line as a means of escaping the problems of daily life. If, in some situations, virtual life seems to offer the individual a place for his own action and interaction that is not offered by real life, then it seems reasonable to suppose that it is in the real context that it is necessary to do something so that the individual finds dignity and equal possibilities to express himself [13].

“Educational actions should take part both in the real world, for example in specialised centres or counselling points and also in the virtual world, through the creation of an on-line forum and virtual communities which help the subject to understand that the two realities are not detached but are aspects of the same real world in which the individual has to interact and accept responsibility for his own actions. In fact the absence of responsibility regarding the other is the main characteristic of the world on line and is the very thing which makes relations via Internet simple, but dangerous. Educational tasks, in such a sense, should be organized to cure the disturbance and alongside this to plan action to support the affective-relational dimension; educational relations, like strategic action, must not only consider the subject in the age of development, but must look at the individual in every moment of his life and therefore, should be seen as the obligation of society in a broad sense and not only of educational institutional agencies dedicated to formation”. [13]

Today there is a greater necessity to teach change than there was in the past. This means arranging strategies and methods in order to train the individual to fight his own resistance to change, in order to harmonize the variations that life presents positively and constructively, in order to view identity crises in an integrative way and not in a destabilizing way. This means that the educative task is to guide development, to strengthen and upgrade the individual's ability to understand and choose with the aim of becoming active protagonists in their own lives and not only in life on screen.

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