

# Research of Influence of Internet Addiction on the Concentration of Attention of Young People

O. Samohvalova, O. Mordkovich, Y. Yumayev, O. Galtseva  
 Omsk State Technical University,  
 Omsk, Russia, 644050  
 National Research Tomsk Polytechnic University,  
 Tomsk, Russia, 634050  
 rabota2013tpu@mail.ru

**Abstract**— The article discusses the problem of the pupils' and students' dependence on the Internet use (the Internet addiction). The historical aspect of the emergence and identification of Internet addiction as a mental disorder is considered. The main types of Internet-based dependencies are described; there are the next types of them: computer-based dependency, compulsive navigation in the network, information overload, cyber-sexual and cyber-communicative addictions. It was revealed that cyber-communicative addiction is the most common type of Internet dependence among young people. It was suggested that there is a connection between the spending time in network and the attention concentration level of the young generation. The study revealed the features of concentration and attention at the presence of the Internet and cyber-communicative addictions. The resulting statistical sample was processed using various techniques aimed at identifying the attention stability level, work efficiency and degree of working persons' in. The performed analysis of the results confirms the hypothesis.

**Keywords**— *Internet Dependence, Types of Internet Addiction, Cyber-Communicative Addiction, Attention, Mental Stability.*

## 1. INTRODUCTION

The widespread implementation of information and telecommunication technologies into various spheres of life of modern society, especially in recent decades, has entailed the development of the so-called Internet dependence, which can significantly affect the psychological health of person due to their own characteristics. Dependence on the Internet and social networks continues to increase with the growth dependence on the technology. Reducing these dependencies is important for the psychological and social status of people [1, 2].

Currently, the Internet is an integral part of the life of any member of society; there is a persistent tendency to reduce the age at which a person starts using the Internet. Toddlers, starting from 2-3 years, actively use mobile devices. Adolescents (11-13 years old) and high school students choose the virtual world, preferring social networks to live communication, look through questionable sites that contain scenes of cruelty and violence, sexual kind information, and the like. Main risk group for the Internet addiction development is young people because of their age-specific features [3-4].

The study of Internet addiction, as a phenomenon, began in the early 90s of the 20th century. For the first time, Internet addiction, as a psychological disorder, was described by American psychiatrist A. Goldberg in 1995. Outwardly it resembled the symptomatology of disorders caused by the abuse of psychoactive substances. So, in his opinion, the use of the Internet is able to cause a persistent painful negative stressful condition of person, causing damage to his psychological and social statuses [5, 6].

Dependence on the Internet and video games is associated with psychological and social concomitant diseases: depression, attention deficit syndrome, alcohol abuse and increased anxiety [7].

Currently, there are various classifications of Internet addiction. Thus, Kimberly S. Young distinguishes five main types [8]:

- computer-based dependency: obsessional predilection for working with a computer (games, programming, etc.);
- compulsive navigation in the network: search information in remote databases;
- information overload: pathological attachment to Internet-mediated gambling or electronic shopping;
- cyber-sexual addiction: dependence on "cybersex" (from the visiting of special sites on the Internet, discussing the sexual topics in the network);
- cyber-communicative dependence: dependence on communication in social networks, forums, group games and teleconferences.

Maressa Hecht Orzack offers the main criteria (symptoms) for identifying this human dependence [9]. The presence of five of them speaks about computer addiction.

The main such symptoms are

- getting pleasure, excitement or relief at the computer;
- the emergence of anxiety, anger and depression outside the Internet;
- ignoring your duties as a result of using your computer;
- lies about the amount of time spent on the computer/Internet;
- lies about the activities carried out on the Internet;
- problems at work or at school as a result of uncontrolled computer activities;
- health problems due to computer activity.

Cyber-communicative dependency is the person addiction on communication in social networks [10]. According to the results of statistical research, it was revealed that classical social networks are the most visited sites on the Internet; sites that are more or less socialized are on second place in the attendance. More than 80% of organizations use social networks as a means of communication with colleagues and clients. Many young people and adolescents with a cyber-communicative dependency have low self-esteem and problems with internal-family and social relationships [11, 12].

The possibility of compensation in the virtual world of values and needs that are not realized in real life lies at the heart of the emergence of Internet addiction; it may be the importance in social environment, personal achievement, communication, love and friendship [13].

These needs are particularly relevant for young people and adolescents. The Internet is able to improve mood, alleviate depression caused by low self-esteem, loneliness, resentment, fear, etc. Significant factors of dependence development are the shortcomings of parenting: permissiveness, suppression of initiative, impunity and non-accountability, which also contribute to the emergence of human Internet addiction [14, 15].

The problem of the phenomenon of Internet addiction is being actively studied, while early studies were reduced to the study of computer dependence among the formed individuals, which included employees of large American campaigns with a pathological attraction to the network [16-23]. Today, young people aged 16-20 years old are a generation which has education and training process with computer and Internet technologies from an early age.

This fact contributes to the formation of other characteristics of the personality psyche (attention, thinking, etc.) than in people belonging to the older age group [24, 25]. Thus, the rapid development of Internet technology and its widespread use in all spheres of life determine necessitate of research in the youth environment.

One of the most common Internet dependences is the cyber-communicative addiction, which refers to the dependence of the individual on communication in social networks. A. E. Voiskunsky singles out cyber-psychology as a separate section of psycho-logical science that explores the types, ways and principles of the use of social Internet services by people [26]. The attention of the individual is the direction of consciousness and the concentration of activity on any particular object that possesses a stable significance for the individual and enhances the functioning memory and intellect [27]. In the course of the study, it was hypothesized that young people exposed to cyber-communicative addiction spend significantly more time performing various activities that require concentration than their peers who do not suffer from such dependence.

**2. RESEARCH METHOD**

To study Internet addiction and attention level, the following methods were used:

- questionnaire diagnosing the Internet dependence degree;
- questionnaire determining the cyber-communicative dependence level;
- the "Schulte Tables" methodology aiming at identifying such indicators as attention persistence, work efficiency, degree of working persons' in and individual mental stability.

The main mathematical methods of research are descriptive statistics and linear correlation.

**3. RESULTS AND DISCUSSION**

As a result of the study, the presence of a fairly pronounced Internet addiction among schoolchildren aged 15 to 17 (33.3% of respondents) and medium pronounced Internet addiction among students aged 20 to 24 (6.7% of respondents) was found out.

Internet dependence is expressed quite moderately in the majority of students; although Internet technologies play an important role in the life of young people, it does not have a detrimental impact. No dependence has been detected only in 3.3% of students; Internet addiction was identified in all schoolchildren.

Similar results were obtained in the study of cyber-communicative addiction. Based on the data obtained, the following assumption can be made about the relationship between age and dependence on social networks and the Internet: the younger a person, the brighter the dependence is expressed.

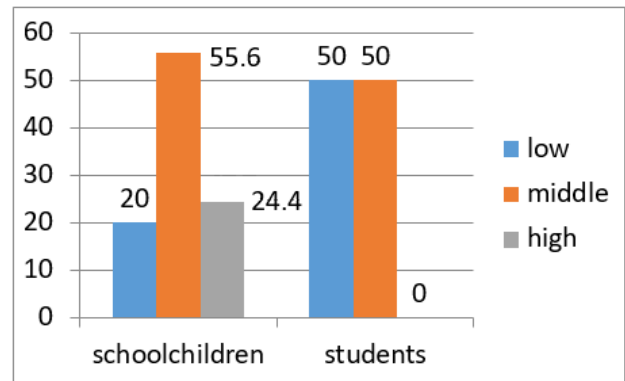


Fig. 1. Features of the pupils' and students' cyber-communicative addiction in percentage.

The result of the correlation analysis is the identification of the relationship between the display degree of Internet addiction and attention concentration level of among young people. The more pronounced is the dependence on the Internet and social networks among young people, the lower the attention concentration level; there are inability to focus on only one activity, the constant desire to check their social networks, the desire to focus on something else and heightened anxiety and irritability.

**4 CONCLUSION**

The research revealed a number of features related to attention level of young people who have medium or

pronounced Internet and cyber-communicative addictions. So, young people have a high degree of working themselves in, which indicates the rapid inclusion of them into the work and multitasking; that is, they can quickly switch from one activity to another. However, almost all participants of the study showed poor results in terms of the mental stability criterion and attention concentration. It suggests that young people are not capable of long-term concentration of attention on only one activity type; they have an obsessive desire to engage another kind or activity object. However, almost all participants of the study showed poor results in terms of the mental stability criterion and attention concentration. It suggests that young people are not capable of a long-term concentration of attention on only one activity type; they have an obsessive desire to engage another kind or activity object.

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