

Quality of Life as a Predictor of the Formation of Internet Addiction of Students of Pedagogical Universities

La calidad de vida que predice la formación del adicción a Internet entre los estudiantes de universidades pedagógicas

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Received: 07/07/2018 • Approved: 22/09/2018 • Published 28/12/2018

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ABSTRACT:

The article presents the results of the interrelation between Internet addiction of 247 pedagogical university students and indicators of their subjective quality of life. Diagnostics had been carried out using "Quality of Life Enjoyment Satisfaction Questionnaire" and "Internet Addiction Test". A higher indicator of Internet addiction among first courses humanitarian specialties students was revealed. Statistically, the contribution of subjective quality of life indicators to the formation of Internet addiction among students was established.

Keywords: Subjective quality of life, Internet addiction of students of humanitarian and physics and mathematics specialties of the Pedagogical University

RESUMEN:

Este artículo se refiere a los resultados del investigación como interactúan adicción a Internet de los estudiantes de universidades pedagógicas y los indicadores subjetivos de su calidad de vida. Los resultados han recibido en el material obtenido de análisis de 224 estudiantes (las humanidades y las ciencias físico matemáticas, universidad pedagógico, 2-4 cursos). La exploración se realizó con el cuestionario "Quality of Life Enjoyment Satisfaction Questionnaire" (Q-LES-Q-SF) y "Internet Addiction Test". Según las estadísticas, ciertas indicadores subjetivos de su calidad de vida influyen en la formación del adicción a Internet entre los estudiantes de universidades pedagógicas.

Palabras clave: La calidad de vida subjetiva, adicción a Internet entre los estudiantes de universidades pedagógicas

1. Introduction

At the current stage of the development of society, in connection with the active introduction of information and communication technologies, the problem of pathological use of the Internet is being updated. According to sociological research in Russia, more than 70% of residents aged 18 and over use the Internet; the daily audience of the Internet is about

60% of adult users, which is about 66 million people. 84 million Russians over 16 years of age use the Internet daily. The growth of the Internet audience is 4 million people per year, which is explained by the active dissemination of mobile devices. Sociologists note that Internet penetration in the environment of young people has reached almost limit values and is 96%.

In parallel with the increase in the number of Internet users, the number of people dependent on the virtual reality of the computer increases. According to K. Young, Internet addiction is becoming epidemiological in modern society and is characterized by rapid development of formation in contrast to other types of dependence, such as alcohol and drugs, for the occurrence of which years are needed. As a rule, from the beginning of active use of the Internet to the formation of dependence passes from six months to one and a half years. The author emphasizes that the danger of becoming dependent on the Internet is for everyone who has access to a computer and a modem, while the risk is especially increased for users of home computers (Yang, 2000). The research data show that people who don't have Internet addiction often use those aspects of the Internet that are connected with the search for information. As for people who have Internet addiction, in the vast majority they use those Internet services that are connected with communication: correspondence by e-mail -13%; participation in the teleconference - 15%, participation in chats - about 40%.

Today, scientists have not come to a consensus on whether Internet addiction is an independent disease. A number of researchers attribute it to psychological phenomena (Drepa, 2009), others, according to the International Classification of Diseases (ICD-10), to disorders of habits and inclinations (taxon F-63) (Tsimberova, Batsurova, Schurko, 2002). Today, Internet addiction is understood as "... a compulsive desire to enter the Internet, being off-line and unable to leave the Internet while on-line" (Yuryeva, Bolbot, 2006).

The first studies of Internet addiction, which was understood as a behavioral disorder caused by the excessive use of computers and the Internet, the result of which is a violation of the social, household, psychological, or other sphere of human activity, were conducted in the 1980s in clinical psychology and psychiatry. In Russia, the problem of Internet addiction attracted the attention of researchers at the turn of the 20th and 21st century, when the Internet became widespread. Today, the features of the personality of people who have Internet addiction are explored (Zhichkina 1999, Chudova, 2002, Yuryeva, Bolbot, 2006), types of Internet addiction (Voiskunsky, 2000, Kotlyarov,

2006) and Internet add-ons (Mendelevich, Sadykova, 2003), mechanisms (Nosov, 2001, Tsoi, 2011) and criteria of dependence (Voiskunsky, 2004), features of the Internet as an addict agent (Loskutova, 2000), signs of formed Internet addiction (Davis, 2001, Hamburger, 2000, Orzack, 1998).

According to research, the Internet is used, as a rule, by people with a fairly high level of education, who are mostly students. This is due to the fact that the characteristic features of the student's age are the motivation to learn new things; active social position; balance of social and intellectual maturity; intensity of the process of socialization and intellectual formation. This age is characterized by a peak in the development of higher mental functions; maximum capacity for work, psychological and physical endurance; flexibility and adaptability; ease of mastering ways of thinking activity of a high level of complexity. At the same time, student youth have an insufficient level of development of self-regulation mechanisms; ability to control emotions and compulsive behavior. On the one hand, all these features allow a young person to use the Internet actively and efficiently as a source of new knowledge, and on the other hand, there is a danger in the context of shortage of time, replacing real interpersonal contacts with network communication or using virtual reality as a means of escaping reality or taking pleasure.

As factors, contributing to the formation of Internet addiction, the following are highlighted: the possibility of implementing different models of role behavior; a sense of security associated with the anonymity of interaction in the network; many variants of self-presentation that are inaccessible to a man in real life; the ability to constantly change the interlocutor, allowing you not to make efforts to maintain the interest of the partner in communication; unlimited access to information, the possibility of achieving a social status

that meets the needs of the individual, not realized in everyday life.

Thus, the danger of transformation of the Internet into an addictive agent is high among those individuals who are not satisfied with their position in the society, work, study, lack of emotional communication, support, and acceptance.

Recently, the search for factors leading to the formation of Internet addiction leads researchers to the problem of the quality of life as a predictor of Internet addiction. The quality of life is a multifaceted concept, actively considered in various fields of science since the sixties of the twentieth century. At the same time, researchers most often turn to the evaluation of social and information indicators of the quality of life of a person, which makes it possible to identify objective indicators of a person's "happiness" (level of health and education, employment, quality, leisure time, access to services, income, amount of social services, and so on). At the same time, objective indicators, although they possess such advantages as accuracy and informativeness, often do not allow revealing self-esteem of one's own life (Diener, 1997). Moreover, the degree of satisfaction with life, the sense of happiness is sometimes diametrically opposed to the objectively favorable social and economic conditions of life (Raizem, 1992).

The subjective evaluation of a person's quality of life consists of cognitive and affective evaluation and is determined by physical, emotional and social components. It is the subjective evaluation of the quality of life that increasingly becomes the subject of research, since it allows us to reveal the basis of the inner sense of satisfaction with human life (Volchegorskaya, 2011). This is due to the acute relevance of identifying what is the basis of the inner sense of well-being with one's own life; what components it is composed of; what emotional assessments lie at its base; finally, how it is possible to help a person raise the level of self-esteem of his own well-being. As noted by Ryff C.D. and Keyes C.L.M. at the heart of the subjective assessment of the quality of life are six personal coping strategies that help preserve the physical and mental health of a person: 1) a positive attitude towards oneself and one's past life; 2) the existence of goals and activities that make life meaningful; 3) ability to fulfill the requirements of daily life; 4) a sense of unceasing development and self-realization; 5) relationships with other people, permeated with care and trust; 6) the ability to follow one's own convictions (Ryff, Keyes, 1995).

Recently, the scientific literature increasingly raises the question of the quality of life as a predictor of Internet addiction. Along with large cross-cultural studies devoted to the interconnection of Internet addiction and the quality of life (Cheng, Li, 2014, Pontes, Szabo, Griffiths, 2015), there are works devoted to the group of the most active "consumers" of Internet traffic - university students. The truth is that they talk only about medical students. Thus, in a study involving medical students of the Tehran Medical University, it was revealed that 16.90% of them demonstrated an increased level of Internet addiction. At the same time, the average quality of life indicator in this group was significantly lower than in the group of Internet independent students. In addition, there was a negative correlation between the evaluation of Internet addiction and the physical, psychological and social well-being of future doctors. The authors of the study concluded that since Internet addiction is growing at a rapid pace, it can further provoke significant academic, psychological and social consequences (Fatehi, Monajemi, Sadeghi, Mojtahedzadeh, Mirzazadeh, 2016).

The study by N. Nagori and other authors also notes that Internet addiction is associated with excessive or poorly controlled needs for the use of Internet traffic, which leads to deterioration or frustration of a person's mental state. This study was aimed at assessing the possible relationship between the degree of Internet addiction and the quality of life among medical students. The results obtained by the researchers also showed that 9.3% of Internet-dependent students experienced significantly higher anxiety and lower self-esteem of the quality of life (Nagori, Vala, Panchal, Ratnani, Vasava, 2016).

Despite a careful search of literary sources, we were not able to find works in which the relationship of Internet dependency and indicators to the satisfaction of life of students studying in the humanities and physics and mathematics profiles would be considered. The presented work is aimed at solving this pressing problem, because allows us to identify the relationship between the indicators of the physical, emotional and social well-being of an

Internet-dependent student of a pedagogical university, who will later come as a teacher to primary and primary school.

2. Methodology

The study involved 247 students 1-4 years of humanities (future primary school teachers) and physical and mathematical specialties of the Pedagogical University of Chelyabinsk. The age of the examinees is 19-22 years. As a tool for studying the quality of life of students, the Quality of Life Satisfaction Questionnaire (Q-LES-Q-SF) was chosen to diagnose and compare the quality of life in terms of satisfaction and enjoyment of life (Endicott, Nee, Harrison, Blumental, 1993). The subjects responded to 16 questionnaire questions, noting the degree of satisfaction in various areas of life, such as physical health, subjective experiences, work (study), household, leisure activities, relationships with people (including family relationships), general activity, as well as satisfaction with life in general. The degree of satisfaction was graded from 1 to 5 points: very low satisfaction, low, moderate, high and very high satisfaction.

The Internet Addiction Test from K. Young (adapted by V. Loskutova) (Loskutova, 2004) has been selected as a tool for revealing the formation of Internet dependence of students, which allows to diagnose pathological predilection for the Internet (regardless of the form of this predilection). The Internet addiction test (IAT) is one of the most used diagnostic tools for Internet addiction. It measures self-observing behavior associated with the compulsive use of the Internet, which includes compulsiveness, escapism and dependence. The questions also assess the problems associated with using the Internet in personal, professional and social space. The respondents responded to each of the 20 randomized test questions in accordance with the continuum of the 5-point Likert scale (never / extremely rare, sometimes, regularly, often, always). Based on the amount of points (from 20 to 100), the level of Internet addiction was revealed: low (ordinary Internet user), medium (presence of problems associated with excessive use of the Internet), high (Internet addiction).

3. Results

In the course of the study, we obtained the following results of the self-assessment of the quality of life and satisfaction of students at the faculty of primary school teachers (PST) and physics and mathematics (PM) faculty (see Table 1).

Table 1
Average indicators of self-evaluation of quality of life and student satisfaction

Indicators of self-evaluation of quality of life and satisfaction	Students of the PST Faculty (N=167)	Students of the Faculty of PM (N=80)
Physical Health	3,08±0,07	3,03±0,10
Mood	3,22±0,07	3,20±0,11
Work (study)	3,01±0,08	3,13±0,10
Homework	3,22±0,07	3,14±0,09
Relations with others	3,65±0,07	3,53±0,10
Family Relationships	3,93±0,08	3,85±0,11
Leisure activities	3,44±0,08*	3,06±0,13

Ability to cope with daily activities	3,92±0,03**	3,15±0,10
Sexual interest / activity	3,13±0,09	3,10±0,14
Economic situation	2,80±0,07	2,44±0,12
Living conditions	3,57±0,09	3,33±0,13
Ability to move	3,89±0,08	3,79±0,12
Vision	3,50±0,09	3,41±0,13
Health care	3,49±0,07	3,33±0,12
Feeling of well-being	2,96±0,07	2,86±0,13
Satisfaction with life in general	3,59±0,05*	3,28±0,11

Notes: * - $P \leq 0.05$; ** - $P \leq 0.01$

The results of the formation of Internet addiction among students are presented in Table 2.

Table 2
Levels of the formation of Internet addiction in students

№	Faculty, course	Levels (%)		
		High	Medium	Low
1	PST, 1 (N=23)	39,13	60,87	0
2	PST 2 (N=34)	29,41	52,94	17,65
3	PST 3 (N=65)	41,54	56,92	1,54
4	PST 4 (N=38)	7,90	86,84	5,26
5	PST, 1-4 (N=167)	30,62	63,75	5,63
6	PM 1 (N=14)	21,43	71,43	7
7	PM 2 (N=31)	29,03	64,52	6,45
8	PM 3 (N=35)	34,28	51,43	14,29
9	PM , 1-4 (N=80)	30,00	60,00	10
10	PST, PM (N=247)	30,42	62,50	7

The questionnaire of self-evaluation of the quality of life and student satisfaction made it possible to reveal that students are less satisfied with their financial situation (2.62 ± 0.09) and physical health (3.06 ± 0.09). However, they highly appreciate their ability to move without difficulty (3.84 ± 0.10). Students of both humanities and physical and mathematical

specialties highly appreciate the level of their interpersonal relationships: relations with surrounding people (3.64 ± 0.09) and especially family relations (3.89 ± 0.09). At the same time, future teachers of primary school have significantly higher satisfaction with their leisure time activities (3.92 ± 0.03 , $P \leq 0.01$). It is interesting that the satisfaction with life in general among future primary school teachers was significantly higher than among future teachers of physics and mathematics (3.59 ± 0.05 , $P \leq 0.05$).

The Internet Addiction Test questionnaire revealed that almost a third of the students (30.42%) are at a high level of the formation of Internet addiction. 62.50% of students noted the problems associated with the excessive use of the Internet. It was identified that there were only 7% of ordinary Internet users, while in the first year of studies in the Faculty of primary school teachers, no student noted the absence of problems with Internet addiction.

A priori it was possible to assume that students of humanitarian specialties are less dependent on the Internet, however, these studies indicate that there are no significant differences. The highest level of Internet addiction was revealed among the third year students, and the number of the future primary school teachers among this group of respondents were found to be higher at 7.26% (41.54% vs. 34.28%).

To study the nature of the relationship between the Internet addiction and the indices of the subjective quality students' life, we conducted a correlation analysis (Spearman's rank correlation method). The data obtained showed a positive correlation between low Internet addiction and high student satisfaction with their life in general ($r_s = 0.21$, $P < 0.01$). An even closer connection was found between the analogous indicator and the general sense of well-being ($r_s = 0.22$, $P < 0.01$). It should be noted that this relationship is most pronounced among the 1st year students of the Faculty of Primary School Teachers ($r_s = 0.44$, $P < 0.05$).

4. Conclusions

A higher indicator of the formation of dependence on the Internet among students of the first courses of humanitarian specialties was revealed.

Almost a third of the students are at a high level of the formation of Internet addiction. Two thirds of the students noted the problems associated with the excessive use of the Internet.

The most pronounced dependence of the indicators of Internet addiction on the quality of life concerns first-year students.

The results of the study allow to consider the self-assessment of the quality of life and student satisfaction as an important basis for the formation of Internet addiction.

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Revista ESPACIOS. ISSN 0798 1015
Vol. 39 (Nº 52) Year 2018

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