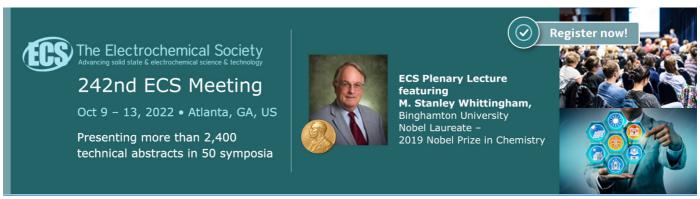**PAPER • OPEN ACCESS**

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Computer addiction as a new way of personal self-realization of student youth

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Abstract. The article presents the results of an empirical study of computer addiction of student youth in the context of personal self-realization by parameters: motivation to succeed, volitional self-regulation, development of emotional intelligence. The aim of the article is to analyze the manifestations of computer addiction as a new way of personal self-realization, to empirically investigate the relationship of individual psychological factors of self-realization of personality by parameters: motivation to succeed, volitional self-regulation, development of emotional intelligence with subjective assessment of computer addiction by the student youth. Psychodiagnostic methods were used: test for Internet addiction of K. Young; Shostrom's personal orientation (short form) in the modification of E. Jones and R. Crandall; N. Hall's emotional intelligence test, a questionnaire to study the motivation to succeed of T. Ehlers; questionnaire "Study of volitional self-regulation" by A. Zverkov and E. Eidman. The study allowed to obtain significant correlations between computer dependence and the level of self-actualization, volitional self-regulation and its components, self-management of emotions as a component of emotional intelligence. Virtual space for the younger generation in modern conditions serves as a means of meeting those significant needs that are frustrated in real conditions. In particular, personal self-realization in student youth is transferred to cyberspace through new hobbies, acquaintances and attributions of their own "I". Thus, computer addiction in this study was considered as a new way of personal self-realization of student youth, which is still treated mainly as a form of deviant behavior. Self-realization on the Internet for modern youth is a significant area of personal self-realization in general, which under favorable conditions complements self-realization in reality, and under adverse conditions replaces self-realization in reality. Taking into account these points will allow to build a system of psychological work with different levels of computer addiction of student youth in the context of their personal self-realization.

1. Introduction

The Internet is an immanent sign of modernity for people of all ages, regardless of profession, leading social status, age and gender differences. Internet networks significantly affect the development of all social groups, including student youth, while promoting their self-realization and expanding social opportunities. Students not only have the opportunity to use a wide range

of information, but also can influence the content of various information resources. Virtual reality is not only a space for comfortable informal communication, but also provides a search for pragmatic information. Modern computer information and communication technologies are becoming part of all spheres of human life, creating new mechanisms of cultural development of mankind, so many authors, among other forms of socialization, consider cybersocialization [1]. Thus, Internet networks have become platforms for learning, implementing business plans and finding employees a long time ago, ie they are a platform for self-realization of educational and professional ambitions of student youth [2, 3]. Internet networks also make it relatively easy for young people to find like- minded people with similar interests and needs; promoting the creation and active development of virtual communities, ie such groups that have common goals and communicate mainly indirectly through information and communication networks.

Virtual reality is part of the psychological reality of human, so self-realization in cyberspace becomes part of our being. According to Yu. Asieieva, adolescents and young people are the most sensitive to the unification and transfer of the reality of life in cyberspace, which is why in the ontogenetic period from 14 to 22 years registered the largest share of people with Internet addiction. The properties of the virtual network (anonymity, accessibility, security, ease of use) allow young people to meet frustrated socio-psychological needs as quickly as possible, to experiment with various transformations of their own identity [3]. Thus, computer addiction in this study will be considered as a new way of personal self-realization of student youth, which is now treated mainly as a form of deviant behavior due to emotional and volitional manifestations of addictive behavior.

For young people, escaping into cyberspace is one of the ways to assert themselves, increase their sociometric status in the group, successful self-realization in virtual reality. The need for self-disclosure in adolescents has the specificity of its manifestation in real and virtual communication, which becomes relevant as a separate topic, and the hierarchy and subordination of these topics [4, 5].

Also, immersion in cyberspace allows to void or forget about unwanted experiences, remotely experience an unpleasant situation for a young person. Therefore, computer addiction is the most common form of personal self-realization in information societies. In general, computer addiction is spreading rapidly among other age groups [6, 7].

Self-realization of student youth through the cyberspace is provided by its positive influences on personal development. The positive factors include: the value orientations of the personality, which are not lost, but determine its self-realization in cyberspace; dialectic of social relations in the virtual reality of the Internet community; protection from situations that create negative feelings in real life; instilling inflated expectations about achievements in professional and social components of life; the ability to ensure presentability and increase the efficiency of communication processes; flexibility of virtual communication in relation to one's own expectations; opportunities to independently design a virtual space according to your own script and implement it in your activities; reduction of restrictions due to specific functions of virtual culture - compensation, balancing or compensation of insufficiently satisfied needs in objective reality; openness, which greatly simplifies mobility processes [5, 8].

The vast majority of student youth creates their own "idealized image" in a virtual environment. This process is dynamic, because in modern mass culture, trends and fashion images that serve as landmarks are constantly changing, mass production makes any sustainable images and actions impossible. In cyberspace, young people have the opportunity to play different social roles and professional-occupational statuses, this is through the creation of new pages with different life stories and "I-images". Such transformations are possible as long as there are no internal contradictions in the structure of self-realization of the individual [9, 10].

The aim of the article is to analyze the manifestations of computer addiction as a new way of personal self-realization, to empirically investigate the relationship of individual

psychological factors of personal self-realization by parameters: motivation to succeed, volitional self-regulation, development of emotional intelligence with subjective assessment of computer addiction by the student youth.

2. Methods

Based on the principles of a systematic approach, computer addiction as an integral part of self-realization of student youth in cyberspace was considered as a socio-psychological phenomenon that has many psychological correlates; its development is ensured by the interaction of emotional, volitional, intellectual components of young people's mental activity, which will promote dynamic cooperation of young people with diverse interests (educational, scientific, artistic, communicative, etc.) and provide new opportunities for activity and self-realization.

K. Young's test was used to detect computer addiction, which detects the dynamics of Internet use and evaluates the symptoms of addiction.

The following psychodiagnostic techniques were used to study the psychological correlates of computer addiction:

(i) E. Shostrom's personality orientation questionnaire (short form) modified by E. Jones and R. Crandall;

(ii) N. Hall's emotional intelligence test (IQ) to study the components of emotional intelligence on 5 scales: emotional awareness, self-emotion control, self-motivation, empathy and control of emotions of others;

(iii) questionnaire to study the motivation to succeed by T. Ehlers;

(iv) questionnaire "Study of volitional self-regulation" by A. Zverkov and E. Eidman to study self-regulation as a behavior that takes into account the results of self-knowledge, reflection and emotional-value attitude towards themselves.

The empirical study was conducted with the participation of full-time and part-time students majoring in 053 "Psychology" at the Faculty of Linguistics and Social Communications of the National Aviation University. Age category: from 20 to 28 years. The total number of respondents is 66 people (100%). The sample was formed on the principle of random selection (randomization).

Mathematical data processing was performed using the SPSS 17.0 statistical package for Windows.

3. Results

According to the method of K. Young, all 100% of respondents in our sample had a slight degree of Internet addiction. That is, they are able to control their actions, can correct them in time or even cancel. They have a sense of control and predictability of their own actions. At the same time, using the Internet brings them positive emotional arousal (especially online games), which causes a slight degree of dependence.

Diagnosis of the need for self-realization according to the modified questionnaire of personal orientation by E. Shostrom showed that the vast majority of respondents (64%) have a high need for self-realization, the remaining 36% - average. Such results are obvious in view of the socio-economic demands (search for passionate individuals who have the desire and potential to improve the world, are potential agents of change in society, initiators of positive changes) that shape the labor market.

Self-realization is more successful and full-fledged when young people are involved in a sufficient number of social connections, so interpersonal communication is especially important here. On the one hand, communication with other people gives the opportunity to acquire new thoughts, goals and values, and, on the other hand, there is a translation of their own

accumulated knowledge, experience, which provides not only follow but also continuation in others. Thus, there is a fusion of two aspects of self-realization: creativity and communication, which are especially important in the case of self-realization of the personality through the Internet.

Therefore, the next method, the results of which it was appropriate to analyze was the test of emotional intelligence by N. Hall. The results of the method are presented in (table 1).

Table 1. The results of the diagnosis of emotional intelligence by the method of N. Hall "Emotional Intelligence Test".

Levels	Emotional awareness	Controlling personal emotions	Self-motivation	Empathy	Controlling emotions of others
High	45 %	18 %	27 %	45 %	27 %
Medium	41 %	27 %	27 %	45 %	55 %
Low	14 %	55 %	46 %	10 %	18 %

As we can see, respondents rated themselves highly on the emotional awareness scale: 45% of the sample well understand their emotional states and the reasons for their manifestation, and 41% of the sample understand the vast majority of their emotional states and their causal links with the events in their own lives.

It may seem that a person who understands, monitors own inner states, distinguishes them, at the same time must be able to manage them, know how these experiences arise and why they are necessary. But the understanding of emotions does not always develop into the ability to manage them: 55% of respondents have a low level of control over their own emotions. This result indicates a weak level of self- regulation of respondents, they reflect well on their states, but can not control them. For example, when we feel fear, we try to calm ourselves down, to suggest that everything is fine and we are not afraid of anything, but models of emotion management due to denial are not effective. It is much more useful to accept and live through it than to fight them, this function is often simulated for us by virtual reality: it allows us to experience emotion, get mental relief, which has a positive effect on psychological and physical condition, allows to continue activities.

Indicators on the scale of self-motivation are consistent with indicators on the scale of emotion management: respondents are mostly limited in their ability to control their activities to achieve the goal. This can give good results, but in the long run this method is not ecological towards oneself, because it can lead to emotional burnout, decreased productivity, psychosomatics, depression, and so on.

Respondents rated their empathy quite highly: 45% at high and medium levels. They are characterized by a peaceful attitude to the world around them, without conflict, because in difficult situations they try to coordinate actions aimed at sincere, calm communication, as they have a hard time experiencing conflicts.

The contradictory result is that despite the low level of management of their own emotions (55% have a low level), the vast majority of them are able to manage the emotions of others. In general, 83% of respondents believe that they know how to control other people's emotions, 27% of them are able to do it at a high level, and 55% at a medium level, ie situationally. Students find that it is easier to influence another person and their psychological state, perhaps because they are looking for such intermediaries, including on the Internet, and for themselves.

Based on the general results obtained by the method of N. Hall, it can be stated that young students are confident in their own awareness of themselves and others, but not motivated enough to achieve their own goals. To confirm this assumption, methods of diagnosing achievement motivation and volitional self-regulation were used. Analysis of the results according to the method of T. Ehlers on the diagnosis of motivation to succeed showed that a significant proportion of respondents 68% have a moderately high level of motivation to succeed, 32% - medium. Developed motivation to succeed in student youth helps to increase the focus on results in current activities and will affect other basic competencies that help solve life problems: initiative, communication, ability to influence others, organization, responsibility, rationality.

The questionnaire of A. Zverkov and E. Eidman allowed to assess the level of development of volitional self-regulation in respondents. The majority of respondents (54%) have a high level of volitional self-regulation, ie they can influence the direction and dynamics of current activities, are well-adapted, active, independent individuals. 23% of respondents have medium and low levels of self-regulation. They are less able to control their actions, the course of activities, do not have a stable socially positive orientation. 68% of respondents showed a high level of persistence. It is known that persistence is considered by many scholars as a predictor of success in various activities, including educational and professional. That is, such students are characterized by a more active, independent position and less likely to pay attention to difficulties. According to the following scale of "self-control" (the ability of the subject to control their emotions, thoughts and actions in difficult uncertain situations) were obtained much lower overall results: high score showed 36% of respondents, medium - 41%, the rest low. These results are partially consistent with the "Emotion Management" scale according to Hall's method. At the same time, self-control is a resource for the psychological well-being of the individual, a means of maintaining mental and physical health, which allows in the course of daily events to maintain the necessary balance in professional activities, personal life and relationships with the world. Thus, the presence of developed emotional and volitional substructures of the personality protects it from various dependencies and even addictions, including computer addiction. Thus, V. Synyshyna and L. Yakovytska noted in their research that the possibility of self-realization of a personality is a constant self- development due to the ability to plan and carry out actions; mobilizing oneself to overcome difficulties; objective assessment of their strengths and weaknesses, the level of their readiness for new, more complex actions and deeds; ability to regulate the motivational-volitional sphere [11].

To determine the statistical significance of the results obtained, we conducted a correlation analysis of data to establish relationships between the following indicators: computer dependence, self-realization, volitional self-regulation and its components, emotional intelligence, motivation to achieve. According to the results of correlation analysis according to Pearson's criterion, a direct positive relationship was established between the degree of Internet addiction according to K. Young and the level of self-realization according to E. Shostrom (r = 0.416, at p ≤ 0.05). This result suggests that the computer addiction of student youth is part of the content of self-realization of modern human, which is revealed in the manifestation of personal potential through various activities. Significant inverse correlations were also obtained between individual psychological factors of personal self-realization and subjective assessment of computer addiction by student youth (table 2).

It has been found that the relationship between computer addiction and volitional self-regulation and self-control is inversely proportional. That is, even the average level of self-regulation as a component of arbitrary management of the individual's behavior and activities reduces the probability of occurrence of dependent forms of behavior. Volitional regulation of personality occurs when maladaptive actions (manifestations of computer addiction) begin to disrupt the course of significant activities, under such conditions, the ability to regulate compensates for "negative" manifestations of addiction (for example, the network steals student

Table 2. Significant correlations between individual psychological factors of self-realization of the personality and the subjective assessment of computer addiction of student youth "computer addiction".

Parameters	General volitional self-regulation	Persistence	Self-control	Emotional control
Correlation coefficient	-,489*	-,422*	-,560**	-,414*
Significance level	,022	,046	,007	,05
Sample	66	66	66	66

* Correlation is significant at the 0.01 level (2-tailed). ** Correlation is significant at the 0.05 level (2-tailed).

productive time).

E. Ilyin and M. Chumakov in the analysis of the concepts of "emotions" and "will" use the term "emotional-volitional sphere of the subject". This concept is used mainly in experimental studies to describe the regulation of activities in difficult conditions. Indirect evidence of this approach is the inversely proportional relationship between computer addiction and the ability to control emotions ($r = -0.414$, at $p \leq 0.05$). It should be noted that the study is not about the process of emotional and volitional regulation in general, but about an arbitrary way of regulating unwanted emotions by student youth.

It can also be stated that there is an indirect correlation between the need for self-realization and computer addiction (table 3).

Table 3. Significant correlations between the level of self-realization and individual-psychological factors of self-realization of the personality.

Parameters	General volitional self-regulation	Persistence	Self-control	Emotional control
Correlation coefficient	,467*	,608**	,431*	,426*
Significance level	,024	,003	,035	,038
Sample	66	66	66	66

* Correlation is significant at the 0.01 level (2-tailed). ** Correlation is significant at the 0.05 level (2-tailed).

The effectiveness of self-realization processes is due to the systematic interaction of motivational, emotional, volitional and other processes. Reliance on emotional and volitional processes allows a young person to conduct activities more effectively, increase its effectiveness, and the degree of emotional and volitional self-regulation, conscious control of personality in cyberspace, provides new opportunities for self-realization in a comfortable environment.

4. Discussion

In essence, the Internet is a creative laboratory where a person can search for their own identity, experiment with it, try different ways of self-realization. Internet self-realization can be a kind of springboard for implementation in regular reality. Internet text, a web image or a work of computer art are creative acts. The result is either a specific object or an image of the subject, because man himself acts as an image that can not exist in the virtual world without the appropriate reaction of the Other. V. Goncharov believes that a new form of self-realization can be considered a virtual self-presentation on the Internet. Created by a real person, the virtual is a product of creativity, a new form of self-reflection. As a rule, the virtual personality does not oppose the real one, but complements it, it is a new form of constructing the "I". The author of the article agrees with V. Goncharov that "thanks to the Internet, the creation of a personal "I project" includes its virtual incarnation, through which a person is also connected to the world, as well as through the usual social interaction. Virtual personality allows a real person to feel a new form of involvement in the world" [12]. The use of electronic devices, according to Yu. Asieieva, actualizes the processes of self- realization of the personality in virtual reality. Adolescents and youths are the most sensitive to the creation of the desired and the transfer of the reality of being in cyberspace [3]. In our opinion, internet self-realization can be regarded as compensatory (in the case of problems with self-realization in fact), and as a trial, experimental, but full-fledged in quality, although certainly narrower than self-realization in actual activities.

The main reason for addictive self-realization on the Internet, many believe the difficulties in self-realization in fact and the removal of these problems online. T. Golovanova and E. Vlasova (2019) proved the existence of a link between excessive enthusiasm of young people for cyberspace and reduced self- actualization [13].

Many studies have focused on the impact of Internet use on student self-efficacy. Self-efficacy in these works is defined as people's belief in their ability to control their own actions and current situations that affect their lives [14–17]. We believe that the use of the concepts of "emotional-volitional sphere of personality", "volitional self-regulation" is more appropriate in terms of their clear definition, criterion and instrumental development. Thus, one of the important tasks of educational institutions with students youths is to create favorable conditions for healthy personality development, adequate value and emotional experiences that promote mental balance; formation of the ability to resolve contradictory situations, to adequately assess oneself; learning coping strategies of behavior that increase stress resistance; adaptive techniques of emotional self-regulation and self-realization, as well as correction of already formed addictive patterns.

Summarizing the views of scientists, it can be stated that the model of the desired activity of the personality in cyberspace is not only the process of communication, but also the need or attempt to address the need for self-realization. The most notable phenomena of the antinomy of cyber activity and personality include the emergence of a certain autonomy in various spheres of spiritual and practical life activity in cyberspace. Therefore, the concepts of personality, its self-realization and values, in particular moral and salutogenic, should be closely connected with the obvious value attitude to technologies that significantly improve the quality of daily life.

5. Conclusions

The Internet is an element of objective reality for the modern student, which is an information field - an endless resource of knowledge needed to implement own ideas. Even as an intangible phenomenon, the Internet objectively affects student youth. This influence penetrates not only into the sphere of education, but also into the professional sphere, influencing the course of self-realization and the final results of current activities of student youth.

It is proved that the computer addiction of student youth is part of the content of self-realization of modern human, which reveals personality potential through various activities

and can be considered as a new way of personal self-realization. An indirect connection has been established between the need for self-realization and computer dependence through correlation with general volitional self-regulation, self-control, emotion management; a direct positive relationship between the degree of Internet dependence according to K. Young and the level of self-realization according to E. Shostrom ($r = 0.416$, at $p \leq 0.05$); inversely proportional relationship between Internet addiction and the ability to control emotions according to N. Hall ($r = -0.414$, at $p \leq 0.05$), general volitional self-regulation according to A. Zverkov and E. Eidman ($r = -0.489$, at $p \leq 0.022$).

Not all students use the Internet only for educational purposes, their Internet- dependent behavior is due to a number of individual psychological factors, which include: social loneliness, which is formed as a result of underdeveloped emotional intelligence, unwillingness to see and take into account the emotions of others, low self-control and insufficient volitional self-regulation. However, under the condition of integration into the activities in cyberspace of achievement motivation, interpersonal communication, self-realization, there is a comprehensive development of the young person's personality. According to the results of the study, the development of excessive computer addiction is hindered by high self-control and involvement of student youth in various types of social activities: educational, professional, social, scientific and creative.

Promising in the further development of this issue is the study of the influence of social and psychological factors that hypothetically may significantly affect the dynamics and content of Internet-dependent behavior of student youth.

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