



Features of the Subjectivity Structure of Teenagers with Different Level of Computer Game Addiction

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Abstract

The article presents the results of studying the subjectivity structure in teenagers with different level of computer game addiction. The subjectivity structure as integrative property, expressed in the attitude of a human to himself as a doer, as well as conscious and deedful attitude to the world and himself in this world, was diagnosed by the questionnaire about "Subjectivity structure of younger teenager".

The subjectivity structure was defined as a level of expression of its components: activity, awareness of the ability to reflect, freedom of choice and responsibility for it, awareness of their own uniqueness, understanding and acceptance of the other, and self-development.

The authors analyzed the subjectivity features of teenagers of different gender "addicted" and just "interested" in computer games. Younger teenagers with a high level of computer game addiction have lower rates of developing subjectivity components such as the development of conscious activity, the ability to reflect, ability to understand and accept another person. The article describes subjectivity components allowing to neutralize the negative effects of the existing computer game addiction in teenagers and to reduce the risk of its rise to a high level.

Keywords: Computer Game, Teenagers, Subjectivity Structure Of Younger Teenager

INTRODUCTION

New socio-economic environment emerging in Russia in consequence of the market reforms places greater demands on the personality, its positive social integration into society. This requirement is especially important for children and teenagers in conditions deprived of axiological orientations and threatened by constantly increasing computer game addiction. Today, almost every teenager has free access to a computer, and unqualified usage of computer may result in computer game addiction in outwardly good children.

Today, about 23% of the total population of Russia is playing computer games; at that the minimum age of the computer player is 2 years. At the same time, there is a growing polarization of children's attitudes toward computer games: on the one hand, there are teenagers, whose interest in computer games is sustainable, while, on the other hand, there are children, not playing computer games or having moderate interest toward them.

Because of cultural and psychological differences in various countries, the problem of computer game addiction is perceived differently. In Spain, computer game addiction is considered a disease, whereas in Denmark, the habit is considered to be a consequence of promiscuity from which a person can be weaned. About 100 thousand people in Germany suffer from a pathological craving for gambling. According to official figures, currently in Denmark with five million population 150 thousand people regularly play various gambling games, while 40 thousands of Danes are diagnosed with gambling addiction. According to different estimates, in Switzerland with a total population of 7 million people there are 30-40 thousand

gamblers. More than 20 million Americans gamble, of which several million are "problem" players. In advanced countries, on average 60% of the adult population are gambling, while 1-1.5% of them may be subjected to gaming addiction. In the USA, due to the special relationship of the population to the psychoanalysts, this percentage is even higher and amounts to 3-5%.

On the one hand, modern computer technologies with their limitless communication, information, and entertainment capabilities, are a powerful tool for intellectual development of the child [16], while, on the other hand, they are means of personality destruction, because they substitute the world of real relationships and actions of the child by computer models, blocking the independence and freedom of choice, and resulting in computer addiction [19]. A high degree of reality, magnificent graphics and sound of modern computer games almost completely immerse a teenager in a game environment, creating the illusion of full presence in the virtual world.

Everyday use of computer by teenagers is of a multidimensional structure, wherein the key is the intensity and style of computer use that is determined by the content of the pursuits (interest to computer games, the use of simple and advanced gaming applications, and virtual communication) [21].

The urgency of the problem of combating computer game addiction is recognized at the state level. The original data of the Russian monitoring showed that the number of children and teenagers aged 7-14 years with varying severity of computer game addiction ranges from 2 to 10%.

Computer addiction phenomenon began to be studied in foreign psychology since the end of 80s. The concept of "computer addiction" appeared in 1990.

A study of computer addiction was conducted by foreign psychologists such as M. Shotton, Sh. Turkle, K. Young and T. Bolbot [4, 29, 30, 31]. The authors consider computer addiction as the pathological predilection of a person to work or spending time at the computer. They suggest that the formation of computer addiction occurs not only because of the need to escape from reality but also largely depends on personal make-up of the individual, especially person's character, defining sustainable human behavior.

Computer addiction is one of the varieties of addictive behavior and is characterized by the desire to escape from everyday life through the transformation of their own emotional and mental mood. At this juncture, the man not only ignores vital concerns, but also slows down his psyche, and quite often completely stops his individual personal development [23].

Currently, five types of computer addiction can be distinguished: compulsive surfing (traveling through the network, searching for information, databases, and search engines); a passion for online trading and gambling; virtual dating; cybersex (interest to porn sites); and computer games [25, 26]. First place is occupied by computer games (26.5%), followed by the surfing through the Internet (12.4%), and the third place corresponds to searching information on the web sites (7.8%). [4, p. 67]. These types of dependencies have both general and specific manifestations.

It is considered that clinical psychologist K. Young [31] and a psychiatrist I. Goldberg [28] are the originators of the psychological study of the Internet addiction phenomenon. In 1994, Dr. Young, Professor of psychology at the University of Pittsburgh in Bradford, developed and approved test methodology, which was a tool for self-diagnosis of pathological addiction to the Internet [30]. According to researchers, the incidence of pathological addiction to the Internet varies from 1 to 5% of the population [28, 31].

Dependence on computer games was first described in 1995 by A. Goldberg. Research, advisory and diagnostic services were established in 1997-1998 focused on the problem of computer game addiction, as well as the first monographs of I. Goldberg and K. Yang [28, 31] were published. The authors consider this psychological disorder as a form of psychological addiction, which is manifested in the obsessive fascination with computer games.

The main consequences of computer game addiction, according to A. Goldberg, are a painful negative stress or distress, as well as damage to physical, psychological, interpersonal, economic or social status [28].

In this study, we consider computer game addiction as a kind of addictive behavior, which is characterized by excessive and prolonged fixation of attention on a computer game, as well as by decline and impaired ability to control the involvement in this activity. As a consequence, the behavior of the teenager ceases to be

independent, the teenager loses the ability to independently set goals and schedule his time.

The modern world is characterized by changing in all spheres of human life. These transformations are especially dynamic in the field of information and communication technologies of human practice, which are directly related to interaction of people in the virtual space of social networks, forums, chats, computer games, etc., rather than in real everyday life. In this regard, priority is being given to the development of human personality characteristics, allowing him to live in a changing world and transform himself in this constantly changing world. Subjectivity is the basis of all characteristics of the person as the subject of life-sustaining activity. The development of subjectivity and overcoming of objectness, that is, the dependence of human on the external conditions, can serve the foundation for the successful transformation of himself and the surrounding reality, which includes both objects of the material world and social relations system.

Native psychology has accumulated vast material associated with the consideration of a human as a subject of activity [2, 6, 7, 27]. The subject's leading ability is the ability of interdependent transformation himself and the surrounding reality, which includes both objects of the material world and social relations system. Subjectivity is a way of personal development and at the same time psychological attribute peculiar to advanced personality. This is a means of restoring the integrity of the human personality and the condition of his autonomy.

According to V.A. Petrovsky, the subject is free, purposeful, reflexing and evolving creature. Each of these characteristics, taken by themselves, cannot neither describe subjectivity in any way, nor be a measure of its distinct manifestation. Subjectivity can be manifested at availability of all these characteristics and their specific structural-functional relationship [18].

Subjectivity is manifested in the course of the activity: "personality as an actor provides control over the integrity of the activity taking into account his goals and external requirements, anticipates possible mistuning of his external and internal conditions, and provides all the necessary and sufficient conditions to achieve the result with regard to the value qualities and time established by himself" [2, p. 53].

Our study was based on the concept of subjectivity developed by E.N. Volkova. According to the author, the subjectivity structure comprises of components such as activity, ability to reflect, freedom and responsibility of choice, awareness of one's own uniqueness, understanding and acceptance of the other person, and self-development. Subjectivity, as an integrative attribute, is expressed in relation of human to himself as a doer, in the conscious and active attitude towards the world and himself in this world, and the ability to produce deterministic changes in the world and in himself [6].

The question of the formative influence of computer games on the development of child's personality, in particular, the formation of his subjectivity, was the key issue in the conducted study.

The analysis of psychological and pedagogical literature allowed identifying two fundamentally different approaches to the solution of a problem on influence of computer games on the child's personality development.

According to authors of the first research trend [15, 26], computer games have a positive impact on a child's development. Child, successful in computer games, faster chooses a strategy of behavior and self-learning, and develops an algorithmic style of thinking.

The authors of the second research trend [8, 9, 13, 24, 25] believe that the frequent sessions of computer games contribute to the generation of habits to the virtual world, mindless entertainment and ease in achieving the goal. They dishabituate the child from patience and weaken his will power. This may result in inadequate perception of the real world.

The development of subjectivity of a child in a computer game was not specifically studied. However, we can assume that in a computer game the subjectivity of the child is not developing. A computer game with certain rules and the algorithms built into the game by the developers does not advance the child's ability to independent activity, removes the need for reflection, does not require acceptance of responsibility for the choice of a subject, eliminates a responsible self-control, since the environment in the view of the child is organized in such a way that ensures the effectiveness of the interaction. But this interaction is not comprehensive. Younger teenager involved in a computer game, first of all, is not receiving the holistic feedback about his behavior, his self-assessment, features of attitude to another person, i.e. all the information that makes the communication process comprehensive, and as a consequence, cannot produce optimal behavior options. Computer game is a virtual reality with well-defined space frame, gameplay, and role-playing positions. With all the variety of visual effects in computer games, it does not inspire the development of the subjective activity of the child and thereby blocks the development of subjectivity.

At the same time, as a personal attribute, subjectivity after being formed has the properties of a protective resource that allows withstanding the negative influences of the subject and the social environment [22]. The subjectivity in younger teenagers is not yet integral personal formation [12, 20], however, its individual components may already be formed and act as protective mechanisms against negative influence of computer games.

It is known that early teenage years are characterized by the beginning of intensive development of the child's personality as a representative of a particular gender that is accompanied by formation of a gender-role identity, definition of the strategy and tactics of gender-role behavior. Therefore, playing computer games may differently influence the development of the child's personality in his early teenage years depending on the gender.

The investigation of the computer game addiction phenomenon is of particular importance in early teenage years that is characterized by rising self-knowledge and self-determination, intense formation of interpersonal

communication with peers and relevant adults, development of logical and theoretical thinking, qualitative changes in the assessments of peers, as well as in relationships with adults.

The degree of formation of personal qualities in younger teenagers and their further development will largely determine the way of life of the individual since they are the foundation for the emergence of new personality qualities.

The task of forming a younger teenager as the subject involved in different types of activities is inextricably linked with the formation of the subjectivity in the teenager, i.e. the development of self-actualization of schoolchildren and the ability to act actively towards the world and themselves in this world.

In our opinion, the problem of influence of computer game addiction on the mental and personal development of the younger teenager has been studied insufficiently. The issues of the psychological factors, conditions and mechanisms that determine the features of computer game addiction in younger teenagers are not fully addressed [11].

The *research goal* was to identify the subjectivity components of the younger teenagers that allow neutralizing the negative effects of the existing computer game addiction and reducing the risk of its rise to a higher level.

The tasks were determined in accordance with the research goal:

1. Assessing the level of computer game addiction among younger teenagers.
2. Identifying the subjectivity components of the younger teenagers that allows protecting the child against negative impacts of computer games and neutralizing the negative effects of computer game addiction.
3. Evaluating the prevalence of computer game addiction in younger teenagers among boys and girls.

Research hypothesis: there is a relationship between the level of computer game addiction and the level of subjectivity development in younger teenagers. Younger teenagers with a high level of computer game addiction will have lower indicators of subjectivity components' development. The relationship between the level of computer game addiction and the level of subjectivity development will be mediated by the gender of younger teenager.

RESEARCH METHODOLOGY

To achieve the research goal and objectives we used the following methods:

– a modified questionnaire was used to diagnose computer game addiction that allowed identifying the level of computer game addiction; the questionnaire was based on the technique for determining the level of the Internet addiction, developed by K. Young (Internet Addiction Test – IAT, 1998) [31];

– a modified "Subjectivity structure of younger teenager" questionnaire was used to diagnose the subjectivity structure; the questionnaire was developed on

the basis of the "Subjectivity structure" questionnaire by E.N. Volkova and I.A. Seregina [6].

Diagnostics of computer game addiction. Currently, Russian researchers mainly use K. Yang's questionnaire [31] adapted by V.A. Burova, as well as questionnaire of E.V. Belovol and I.V. Kolotilova to assess levels of engagement in role-playing computer games among teenagers of 13-15 years old [3]. Other questionnaires are used as well [14]. Nevertheless, there is no methodology allowing determining the level of computer game addiction among younger teenagers. Therefore, based on the methodology to determine the level of Internet addiction by K. Yang, we have developed a questionnaire that allows assessing with a certain degree of probability the level of computer game addiction in children in their early teenage years.

Modified version of the questionnaire was standardized through sampling of 304 people (pupils of 5-6 grades at the age of 10 to 12 years studying at general education schools in Nizhny Novgorod, of which 150 (49%) were boys and 154 (51%) were girls [10, 11].

The questionnaire contains 22 questions, which define the five basic scales: emotional attitude to computer games; self-control in a computer game; purposeful focus on computer game; parental attitude to a computer game; and the preference of virtual communication over the real interaction.

1. *The scale of emotional attitude to computer games* (the index of emotional attitude to computer games, *Ie*). A high index indicates a high level of emotional attractiveness of a computer game for a child. The game serves as a way to reduce psycho-emotional stress, as a means of compensating for unmet needs of the individual (the need for communication, parental care, etc.). In the course of computer game teenager feels a sense of emotional lift. A low score indicates a negligible level of emotional attractiveness of a computer game for a child. The game is rather a means of leisure.

2. *The scale of self-control in a computer game* (*Is*). A high index indicates a low level of self-control of a teenager in a computer game. As a rule, the child does not want to interrupt a computer game, is irritated at the forced distraction from the game, and is unable to schedule the end of playing computer game. A low score indicates the presence of self-control over the process of playing computer game; the child can be distracted from the game if necessary, and is able to schedule the end of playing game.

3. *Scale of purposeful focus on a computer game* (*If*). High indicator is an evidence of permanent desire to achieve better results in a computer game, gambling involvement in a computer game. Low indicator shows a moderate desire to achieve ever higher scores in a computer game; the game serves a means of leisure and not a goal in and of itself.

4. *Scale of parental attitude to computer game* (*Ip*). A high index on this scale indicates a negative attitude of parents towards computer games. Parents forbid computer games or seriously limit the time spent by the child on a computer game. A low score indicates the

positive attitude of parents towards computer games. Parents themselves initiate the activity of the children associated with a computer game: they buy new computer games and are satisfied with the child's engagement with a computer game at home.

5. *The scale of preference of virtual communication in a computer game over real interaction* (*Ic*). A high score on the scale indicates that computer game is a means of communication and self-esteem of the child, replacing the real interaction process. The lower index shows that a computer game does not replace real communication of the child and serves as an additional means of communication.

Each question of the questionnaire involves six possible answers: "never", "rarely", "sometimes", "often", "very often", and "permanently". When processing the results, each answer of the testee was assigned a score from 1 to 6 according to these six categories. Scores were summarized for each scale of the questionnaire. In consequence we calculated indices to determine the level of computer game addiction, namely: low level (from 6 to 11 points); moderate level (from 12 to 21 points); and high level (from 22 to 37 points).

Low level of computer game addiction characterizes teenagers for whom a computer game is an entertainment that does not have negative consequences. Children control their gaming activity, play rarely, and seldom think about the game. In fact, these teenagers are not susceptible to computer game addiction, though manifest an interest to computer games, which consists in meeting the needs of the game itself, where the game is a means of obtaining emotional release.

Moderate level of computer game addiction shows that the game is an important part of teenager's life. His attention is focused on certain types of computer games, but teenagers do not lose control over the frequency of gaming sessions and time spent on the game. For the younger teenager a computer game is a means of relieving psychological stress, a means of self-assertion, where the idea of the prestige value of computer games is associated with a corresponding status among peers. The computer game allows balancing various life's difficulties and troubles, serves as a means of compensating for failures in communication.

High level indicates that a computer game takes all the spare time of a child. The teenager thinks about a computer game, about the results achieved, and makes efforts to improve these results. Children, who have shown this level of dependence, cannot divert their attention to any other activities, they are completely absorbed in a computer game, since game replaces the real interaction.

Diagnostics of the subjectivity structure of younger teenagers was carried out by means of the questionnaire concerning "Subjectivity structure of the younger teenager", which consisted of six scales to diagnose activity, awareness of the ability for reflection, freedom of choice and responsibility for it, awareness of their own uniqueness, understanding and acceptance of the other person, and self-development [20]. Modified version of the questionnaire was standardized through sampling of

304 people (pupils of 5-6 grades at the age of 10 to 12 years studying at general education schools in Nizhny Novgorod, of which 150 (49%) were boys and 154 (51%) were girls [11, 17].

The content and interpretation of the scales of the questionnaire are as follows.

1. *Awareness of their own activity.* A high index corresponding to this scale shows the active participation of the child in the transformation of reality; the versatility of the teenager's needs, interests, motives, abilities, attitudes, orientation, knowledge and skills necessary for approving himself in various activities, as well as ability to discover new things. A low level on the scale indicates certain apathy, lack of initiative and, most often, lack of tenacity of purpose.
2. *The ability for reflection.* A high score on the scale indicates the ability of a child for self-possession and self-control in the course of activity, his ability for reflection as a means of self-cognition. A low score on the scale indicates the insignificance of their own efforts for success, and the lack of ability of foreseeing the possible sequence of events. In achieving success and respect for themselves major importance is attributed to external circumstances. This category of teenagers may have inadequate self-esteem.
3. *Freedom of choice and responsibility for it.* A high score on the scale testifies to the development in the child of particular value related attitude to objects of social reality meaningful for him. Conscious activity, driven by set goals is freely executed. Here the freedom is inextricably linked to responsibility and ability to accept this responsibility by teenager. The possibility of freedom of choice in various real-life situations is expressed in the ability of the child to electively choose activities, social cycle, ways of self-expression, and take responsibility for this choice. A low score on the scale indicates the activities limited by external standing order and the compliance with regulations. Thus, the choice of their own path of life in general, as well as roads to achieve objectives is characterized by a low degree of freedom and low sense of responsibility of the individual before himself and other people.
4. *Awareness of their own uniqueness.* A high score on the scale indicates the child's comprehension of the uniqueness of the individual self in time and space as well as awareness of their individual purpose in life. The uniqueness is manifested in the feeling of sympathy towards themselves, self-perception as a confident, independent, reliable person, who has something to respect himself for. The uniqueness is expressed in the feeling of the self value, and at the same time, individual value perceived by others. Low level of index is characterized by weak understanding of the unique features of child's personality, a low level of experience by the child of the degree of his

individual destiny, low expression of feelings of affection for himself, treatment of himself as unconfident person lacking independency and reliability.

5. *Understanding and acceptance of the other person.* A high score on the scale indicates the attitude of a teenager to another person as a self-valuable personality. The low value shows the attitude of a teenager towards another person as to a thing.
6. *The ability for self-development.* A high score on the scale indicates a strong desire to improve knowledge and skills, the child's desire to change in relation to the available potential, and the ability to perceive impulses about their changes from others. A low score shows that the child has poorly expressed aspiration to improve their knowledge and skills; he is "closed" to external influences.

The questionnaire contains 24 statements, suggesting four possible responses: "agree", "disagree", "sometimes", "don't know". Processing of results is performed using 'key': coincidence in answer is scored as 1 point, the answer "sometimes" – 0.5 points, the answer "don't know" – 0 points. Scores are summed for each scale of the questionnaire. The development level of subjectivity structure components is determined based on total score: low level (from 0 to 1 point), moderate level (from 1.5 to 3), and high level (from 3.5 to 4 points).

The *sample* of the conducted research included 146 pupils of 5-6 grades at the age of 10 to 11 years studying at general education schools in Nizhny Novgorod, of which 72 (49%) were boys and 74 (51%) were girls.

RESEARCH FINDINGS

In the course of diagnosing computer game addiction among younger teenagers it was revealed that a low level of computer game addiction was peculiar to 61% of the tested children (150 pupils); the moderate level was determined in 36% (89 pupils), while high level was detected in 3% (7 pupils). Thus, most of the children had a low level of computer game dependency that was not a threat to their personal development. We could talk about computer game addiction in teenagers starting from the moderate level.

Based on data obtained, the sample was divided into two groups. The first group consisted of children with a low level of computer game addiction (62% of the surveyed), which was identified as a group of teenagers being fascinated about computer games. The second group consisted of children with middle and high levels of computer game addiction (38% of the surveyed), which was defined as a group of teenagers characterized by computer game addiction.

It was revealed that the prevalence of computer game addiction among boys and girls was rather different. Reliability of estimate of the mean differences in boys and girls in terms of the level of expression of a computer game addiction was carried out based on Student's t-test (Table 1).

Table 1. Distribution of computer game addiction level among teen boys and girls

Level of computer game addiction	Girls (N = 122)			Boys (N = 124)			Total number of teenagers (N = 246)
	Number of people	Sample %	M± σ	Number of people	Sample %	M± σ	
“Fascination ”	78	64	10.52±2.1*	47	38	12.43±4.8*	125
“Addiction”	44	36	19.08±2.7*	77	62	20.26±3.3*	121

Note: * – significant differences, $p < 0.001$

Table 2. The differences in the average values of the subjectivity components in boys and girls with different level of computer game addiction

Parameters of subjectivity	Level of computer game addiction			
	Fascination		Addiction	
	Boys N = 27	Girls N = 47	Boys N = 45	Girls N = 27
Awareness of their own activity	1.59±0.5**	2.19 ± 0.5**	1.98±0.7**	2.19 ± 0.5**
The ability to reflect	2.56±0.5**	2.38 ± 0.5**	2.00±0.4*	2.00 ± 0.6*
Freedom of choice and responsibility for it	2.15±0.4*	1.94 ± 0.4*	1.93±0.7*	1.89 ± 0.3*
Awareness of their own uniqueness	2.15±0.5*	2.04±0.6*	2.02±0.7*	1.96 ± 0.4*
Understanding and acceptance of the other person	2.00±0.0*	1.96±0.2*	1.62±0.5**	1.81 ± 0.4**
The ability to self-development	2.22±0.4*	2.11 ± 0.5*	1.71±0.6*	1.81 ± 0.4*

Note: * - insignificant differences, $p < 0.5$; ** - significant differences, $p < 0.001$.

The results obtained show that computer game addiction was experienced more likely by boys (62%) than girls (36%), while fascination with computer games was more typical for girls (64%) than for boys (38%). At the same time, the level of computer game addiction in boys was significantly higher than that in girls. That is, boys are more fascinated by computer games and the risk of formation of computer game addiction in boys is higher than in girls.

The growing interest of boys in computer games, in our opinion, should be considered in the context of peculiarities of their psychological development, and in content features of computer games that allow computer game to become addictive agent.

A higher level of computer game addiction in boys probably is due to the specific nature of gender development, along with social factors and lack of competence in communication. Many foreign and domestic psychologists, noting the crisis nature of the transition period in teenagers, highlight various difficulties in their interpersonal interaction [1, 5, 9]. Despite the differences in approaches to the essence of peculiarities in early teenage years, psychologists agree that crisis situations in this period and their resolution or fail in resolution have significant influence on the formation of personality and its socialization.

The reason for the increased interest of boys in computer games compared to girls may be in fact that girls become psychologically mature earlier than boys. "Girls of any age group show greater signs of maturity than boys with regard to physical (gender determining) status and

social orientation, as well as cognitive skills and interests (Dixon & Street, 1975)" [13, p. 277]. The spirit of adventure, passion, and the ability to get involved with something are more typical for boys. They tend to be the first, to achieve high performance in a computer game, to conquer, thus gaining a sense of risk and other emotions.

The fascination of the girls with playing computer games is more widespread phenomenon though less pronounced than in boys. This phenomenon may be associated with the fact that girls are more socialized than boys, and for girls computer game, being one of the contemporary challenges, is more developed type of activity, though they do not tend to master it at a deep level. Girls have more socially important occupations than boys. Girls more often go in for sports, read books, and are more likely to make friendships.

Table 2 shows data revealing differences in the average values of the subjectivity components in teenagers with different levels of computer game addiction for boys and girls.

In consequence of the data analysis it was revealed that between boys and girls being fascinated with computer games, there are significant differences in subjectivity components such as "Awareness of their own activity" and "Ability for reflection". At that, comparing with boys, girls being fascinated with computer games, have more advanced awareness of their own activity, while their ability for reflection is less developed. In other words, girls are more conscious than boys about the importance of their own efforts in achieving success, and attribute respected treatment toward them to external circumstances. At the

same time, girls have lower ability to anticipate possible sequence of events, have a lower level of desire to change themselves in relation to the available potential, and low development level in the ability to perceive impulses about their changes from people around them.

Significant differences between boys and girls having addiction to computer games were observed in subjectivity components such as "Awareness of their own activity" and "Understanding and acceptance of the other person". Boys with computer game addiction aware of their activity to a lesser extent in comparison with girls, as well as to a lesser extent they have developed the understanding and acceptance of the other person. That is, boys with computer game addiction are less active, they have less developed desire to change in relation to the available potential, as well as the ability to perceive information about their changes from the others and the ability to predict possible sequence of events. The boys with computer game addiction are characterized by ignoring or implicit use of the interests and intentions of the other person for their own purposes.

DISCUSSION

Subjectivity development of a child in every age has its own peculiarities, however, the studies devoted to the development of subjectivity henogenesis [2, 7, 12] note that there is heterogeneity in development of the individual subjectivity components, as well as pronounced heterochronism, and at the same time, the absence of subjectivity in child ages as integral property.

At early teenage years, the most rapidly developing subjectivity components include activity, awareness of the ability to reflect, freedom of choice and responsibility for it, awareness of their own uniqueness, understanding and acceptance of the other person, and self-development. The formation of these components is primarily conditioned by the social environment in which the child lives, and the quality of relations between the child and surrounding people. If living and interrelation environments are characterized by poverty and a uniformity of drivers for growth and development, than younger teenagers start to look for these conditions in a computer game.

A computer game is of interest to the younger teenager, it captures him by story and multimedia effects. This is the simplest means of meeting needs in the cognitive and quasisocial activity, though, as the research results show, these means are ineffective; 38% of younger teenagers are unable to confront the computer game and are characterized by computer game addiction.

The results of the study have shown that there is a correlation between the level of computer game addiction and the level of subjectivity development in younger teenagers. Younger teenagers with a high level of computer game addiction have lower rates of development of subjectivity components. At that, computer game addiction is the most destructive for the development of conscious activity, the ability for reflection, ability to understand and accept the other person.

The level of computer game addiction and the level of subjectivity development are dependent on the gender of younger teenager.

Compared to boys, girls being fascinated with computer games have more developed subjectivity component such as "Awareness of their own activity", that is, girls more than boys are aware of the importance of their own efforts to achieve success. At that, girls are characterized by less developed "Ability for reflection", that is, girls are able to foresee possible sequence of events less than boys, as well as they have a lower level of desire to change in relation to the available potential.

Compared to boys, girls with computer game addiction, as well as those being fascinated with computer games, have higher "Awareness of their own activity"; girls with computer game addiction are more active. As compared to boys, girls have more developed ability to understand and accept the other person. They are less than boys inclined to ignore the interests and intentions of other people for their own purposes.

A higher level of computer game addiction in boys may be due to the specificity of gender development. First, the girls become psychologically mature earlier than boys. For boys more typical is the spirit of adventure, excitement, the pursuit of hobbies. Boys more than girls tend to be the first, to achieve high results in a computer game, to win, thereby getting the adrenaline, the sense of risk and other emotions [22, 25].

Second, girls are more socialized than boys, and computer games being one of the mechanisms of modern socialization challenges are for girls certain type of activity, though mastered at not-so-high level. Girls have more socially important occupations than boys. Girls more often go to mugs, sports sections, read books, more often have friends, and better than boys know how to make friends [5, 9].

Majority of parents in families with younger teenagers having a high level of computer game addiction do not consider the fact of child's excessive use of computer as a real problem. This may be due to the lack of computer literacy of the parents: they have not formed a "culture of communication" with modern computer technology, often don't know the safety rules and generally accepted standards of working with computer for children of different ages.

The major task of parents, in our opinion, is an attempt to channel the child's fascination about computer into a useful direction. In this sense, the role of the family is very important in shaping the child's personality when using computer games, and from our viewpoint, is a factor of counteraction to computer game addiction.

To understand the benefits and harms of computer games, the adults themselves must delve into the virtual interests of the child, jointly purchase new computer games, and even play with the children. Collaborative computer work and joint creativity will allow children and parents to feel themselves organic whole, help to better know each other, and maintain a positive microclimate in the family that is very important for upbringing a self-sufficient creative child.

Parents, when mastering the computer together with the child, shape a cultural socially adapted person. The computer must be for a child the means providing positive influence on the formation of psychophysical qualities and personality development.

Parents should remember that for the child, the game is a natural environment of development, that his fantasies are based on whole surrounding life. And the more diversity is in this life, the more opportunities are for the child's development.

Parents can use computer games that help developing memory, attention, imagination and other cognitive processes contributing to child's development. But even the use of educational and developmental computer games should be regulated. The child should be taught to interact with the computer.

CONCLUSION

Early teenage years are considered the most important age-related stage in the formation of a child's personality. This period is characterized by important changes in social relations and socialization, because the predominant influence of the family is gradually replaced by the influence of the peers group, serving a source of behavioral norms and a certain status.

It is therefore particularly important to develop the subjectivity components in the younger teenagers that allow protecting the child against negative influences of computer games and neutralizing the negative effects of computer game addiction.

Current situation requires a search for effective methods and means for the prevention of computer game addiction. Currently, this is especially important because computer game addiction occurs unlike other types of addiction not in a socially disadvantaged environment but in everyday life. Consequently, the involvement of teenagers in computer games is not seen as a violation of his social life and development, but as normal and even desirable leisure. Today, almost every teenager has access to a computer, and the computer often pushes into the background all other aspects of a teenager's life, shaping the computer game addiction in outwardly good children.

In our view, the counteraction to computer game addiction from the side of child's personality is determined by the formation of child's social competence as a special component of personality potential, allowing him to behave actively and constructively in any life situation.

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