

Pedagogical model of prevention and correction of teenage computer addiction in students of social institutions

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Abstract

Due to the expanding computerization of all spheres of life and comprehensive application of computer technology by teenagers, brought up in social institutions, the problem of prevention and correction of computer addiction in such adolescents is becoming increasingly important. However, methodology and didactics to realize these processes are still insufficiently developed, which is shown by the lack of organizational and pedagogical support for prevention and correction of computer addiction among such adolescents. This article focuses on the development of pedagogical models of prevention and correction of teenage computer addiction in students of social institutions (e.g., orphanages and social shelters). The leading methods in the study of this problem were the comparative method and modeling. The comparative method revealed positive Russian and foreign experience in solving problems of computer addiction. The modeling method allowed to create the modeled system of pedagogical prevention and correction of computer addiction and make it available for a thorough and comprehensive study. This article presents the pedagogical model for reducing the negative impact of computer addiction on the personality of adolescents brought up in social institutions, both already established addicts and adolescents at risk. The paper also suggests the proven organizational and pedagogical conditions to raise the effectiveness of the given pedagogical model implementation in students of social institutions. The findings of the article may be useful for teachers, educators, psychologists at social and educational institutions investigating the problem of addictive behavior in adolescents.

Keywords: computer addiction, Internet - addiction, computer game addiction, prevention and correction of computer addiction, teenagers, students of social institutions, orphanages, social shelters, organizational and pedagogical conditions

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1. Introduction

In the modern world teenagers have already realized and exploited all the benefits of using computers and the Internet, though the excessive computerization of everyday life has a negative impact on the socio-psychological and physical health of adolescents, namely, it contributes to the emergence of computer addiction. The children "at risk", especially those from orphanages and social shelters, are even in more danger of computer addiction. Such children have many specific features regarding personality traits and behaviors that impede their social adaptation and the virtual world enables them to meet those needs that are not met in real life and becomes the alternative to replace the cruel reality (Drozdikova-Zaripova, 2014; Rybakova & Biktagirova, 2015; Khuziakhmetov, Shafikova & Kapranova, 2015). Genetic predisposition to various addictions also plays important role in it (Drozdikova-Zaripova, Valeeva & Shakurova, 2012).

There are works of the Russian and foreign scientists, dedicated to risk factors of addictive behaviors formation in adolescence (Lichko & Bitensky, 1991; Mendelevich & Sadykova, 2002; Kostyunina, 2008; Zakirova, Gaysina & Zhumabaeva, 2015); various aspects of Internet addiction and computer game addiction (Voykunsky, 2000; Ivanov, 2003; Fedorov, 2004; Kotliarov, 2006; Egorov, 2007; Goldberg, 1996; Young, 1998; Greenfield, 1999; Davis, 2001, etc.).

In recent years, the problem of prevention and correction of teenage computer addiction occupies one of the most important areas of scientific researches of both Russian and foreign scholars (Loskutova, 2004; Saglam, 2009; Yurieva & Bolbot, 2006, and others).

However, there are not enough studies analyzing the possibilities of social institutions for the organization of prevention and correction of addictive behavior of adolescents, computer addiction in particular, as well as studies on specific methodological developments for implementing preventive and correctional programs for this category of children.

2. Methodological Framework

Analysis of psychological and educational researches on the problem of the given study allowed to formulate the concept of computer addiction, which is regarded as a form of destructive behavior, expressed in the pursuit of uncomfortable reality avoidance by means of changing one's mental state to focus of attention on the Internet resources and computer games, which leads to a sharp reduction in all other activities, limits of communication with other people (Drozdikova-Zaripova, Valeeva & Shakurova, 2014; Nasibullov, Kashapova & Shavaliyeva, 2015).

Pedagogical prevention and correction of computer addiction in teenagers is viewed as the system of measures aimed at changing the behavior and development of the personality of a teenager by special means of psychological and pedagogical impact which influence teenagers' further overcoming of computer addiction. Theoretical and methodological area of the studied problem includes system-forming pedagogical approaches and a set of principles of prevention and correction of computer addiction in teenage students of social institutions. Among the main approaches of prevention and correction of computer addiction in teenage students of social institutions there are emphasized axiological, humanistic, person-centered, activity-based, event-related ones; as for the determining principles we take the unity of diagnosis and correction, integrity, subjectivity, educational support, social - psychological adaptation, activity, periodic mobilization and relaxation, informativeness (Drozdikova-Zaripova, Valeeva & Shakurova, 2014).

In order to enhance understanding of the specially organized system of corrective training to address and prevent computer addiction it seems necessary to briefly highlight the features of its experience in implementing both abroad and in the practice of the Russian social institutions.

2.1. Analysis of computer addiction correction experience (Internet addiction and computer game addiction) in some countries (the USA, China, South Korea, England)

Currently, in the United States there are the clinics to treat Internet addiction. In Bradford, Pennsylvania, Dr. Kimberly Young established a clinic treating Internet addiction. For the clinic there was developed a special treatment program based on cognitive behavioral therapy aimed at addressing the major challenges the Internet-addicted people face. Treatment of patients varies depending on the type of Internet addiction and consists in modifying patients' behavior by gradually reducing the amount of time spent on the Internet and also in teaching them various social skills. In 1995 K. Young also created a Help Center for people suffering from Internet addiction (Center for On-Line Addiction). In this Centre Internet-addicted people were given advice online via phone, e-mail and a specially organized forum.

In 2009, in Redmond (Washington) there was opened a Heavensfield Retreat Center - a rehabilitation center to treat Internet addiction, where specialists offered their clients to take an expensive special course called reStart, 45 - day abstinence from the Internet, as well as the inclusion of participants in various activities on the formation of new hobbies and skills of computer-free life.

There are institutions for Internet addiction treatment in other countries as well. In China, the problem of computer addiction has become a national one. Chinese young people are officially banned from attending Internet cafes; the implementation of the law is periodically checked with the help of police raids. In 2007, the government started recommending the manufacturers of games to embed a special system that prevents the game, lasting more than three hours. But the most prominent government initiative was the creation in 2005 of rehabilitation centers for Internet addiction treatment, where the main approach to correct computer addiction was the physical one (drilling, strict regime and physical activity), using, if necessary, antidepressants and electroshocks. By 2009, China had already had about 200 of such centers, most of which looked like army barracks.

Very soon centers for Internet addiction treatment appeared in many Asian countries - South Korea, Thailand, Vietnam.

At the moment, there are being opened health facilities and programs to provide treatment and prevention of computer game addiction. Thus, the Ministry of Culture and Sport of South Korea has developed a program Nighttime Shutdown, designed to deal with computer game addiction. The essence of the program is to close access to on-line games for gamers under 19 to play for six hours a day, as well as to gradually reduce the speed of Internet connection for those users who play online games for longer than a specified time.

In England, on the premises of the rehabilitation center Broadway Lodge, there was opened a department specializing in dealing with computer game addicts on the program, consisting of twelve stages. The program is designed both for children and for adults (Drozdikova-Zaripova, Valeyeva & Shakurova, 2014).

2.2. Peculiarities of preventive and corrective work to overcome computer addiction (Internet addiction and computer game addiction) in Russia

In Russia, unfortunately, the problem of correction and prevention of computer addiction is not given due attention. Depending on the point of view on the place of computer addiction in the modern science, different approaches to the correction and prevention of such behavior are applied. For example, A.V. Kotliarov (2006), regarding computer addiction (or, as he calls it a virtual addiction) as an independent phenomenon, offers to fight the addiction with the help of psychological training.

According to F.A. Saglam (2009), the main purpose and objectives of the correction and prevention of Internet addiction in adolescents include the promotion of personal development of teenagers; realization of the creative potential of adolescents to self-examination for the prevention of addictive

behavior; the development in adolescents of information culture, the degree of responsibility, awareness in the evaluation of information processes and high-level operations with health-saving technologies when working with a computer and the Internet. Under the proposed system, this can be achieved by using the forms and methods of correction pedagogy: plot-role-playing games, trainings, heuristic conversations, lectures, workshops, brainstorming, group discussions, independent work, project work. It is important to note that here computer technologies serve as the correction means.

L. N. Yurieva & T. Yu. Bolbot (2006) also put forward as a leading principle of the correction not depriving the users of their access to a computer, but the normalization of their computer activities, working with computer technologies. They offer to divide the correction into stages: diagnostic stage, informational and educational stage, behavioral modification strategies stage, the stage of family and social relations correction, the stage of overcoming the effects of computer addiction. The correction system of L. N. Yurieva & T. Yu. Bolbot involves the creation of special correctional environment, including hospitalization.

In her works, V. A. Loskutova (2004) concluded that in the process of correction of addictive behavior with pathological use of the Internet, it is important to avoid the formation of guilt in the addict. On the contrary, it is necessary to awaken addict's healthy critical attitude to his pathological addiction. The psychotherapeutic approach to the addict implies durative (not less than 6 months) individual and / or group therapy in the modality of cognitive-behavioral psychotherapy. The purpose and objectives of psychotherapy include: increase in self-esteem and self-awareness, strengthening of control over impulses, increase in the stability of interpersonal relations, social adaptation; analysis of current coping strategies and development of new, more effective coping strategies; teaching goal-setting, as well as taking care of oneself, one's mental and physical health. If necessary, psychotherapeutic influence should be accompanied by psycho-pharmacotherapy by drugs relieving the emotional stress.

Careful attention is paid to work with Internet addict's family. Thus, V. L. Malygin, N. S. Homeriki and others (2011) for the prevention and correction of Internet addiction noted the importance of family relationships therapy.

Currently, in big cities of Russia there are being opened new universal medical centers, which also provide professional help for people suffering from computer game addiction, Internet addiction on individual treatment regimen.

3. Results

This article presents a designed and tested model of pedagogical correction and prevention of computer addiction, which is focused on a systematically diagnosed corrective and preventive work to reduce the negative impact of the computer addiction on teenagers' personality - students of orphanages and social shelters, both already established addicts and mostly adolescents at risk. The developed pedagogical model is viewed as a supporting scientific and analytical tool for searching, validating and making rational decisions to correct and prevent teenagers' computer addiction in educational environment of social institutions.

The developed model includes the following components: target component, methodological, didactic and effective.

The target-oriented component of the model includes all the diversity of the goals and objectives of correctional - preventive work to reduce computer addiction among teenagers, solved by educators of social institutions in the educational process.

The main strategic goal of pedagogical correction of computer addiction and its subsequent prevention in children's social institutions is promoting personal development of teenagers, the

development of adolescents' information culture, the degree of responsibility and awareness of information processes and resources evaluation, the formation and implementation of adolescents' creativity and their abilities to self-awareness and self-regulation.

Within the framework of achieving the above objectives there were defined tasks to be solved in social institution. These include: 1) identification of the causes and factors, the specificity of manifestations and consequences of computer addiction in adolescents at risk under the social institutions conditions; 2) the formation of knowledge about information threat in adolescents, the ability to resist and to reduce its negative consequences, raise awareness of the responsibility and formation of reasonable decision-making on taking or banning of any action connected with the use of computers and the Internet; 3) formation of skills, life approach, value system necessary to resist computer addiction in teenagers; 4) development of conscious control on new computer technologies mastering in the course of life; 5) organization of social and psychological adaptation of teenagers at risk to recover their main social function of personality and social status; 6) formation and development of adolescents' volition, skills of self-organization and leisure time management; 7) development of communication culture, support in positive self-esteem development, self-confidence formation.

The methodological component contains a set of system-forming pedagogical approaches and above-described principles on correction and prevention of computer addiction.

The didactic component is a didactic system of teenagers' computer addiction correction and prevention, unifying applied teaching methods, forms and means of pedagogical influence and interaction that most contribute to the success of compensation and adaptation of teenagers to the demands of social environment and create favorable conditions for the recovery of identity and formation of non-addictive mindset and behavior of teenagers in a specially organized social and psycho-pedagogical environment.

Among the tested methods, forms and means of correction and prevention of computer addiction are: heuristic conversation, group discussions, games, trainings, psycho-gymnastics, brainstorming; individual, pair, micro-group, group, frontal form of impact and interaction; visualization, relaxation, role-playing.

The resultative component defines the effectiveness of this model and compatibility of results with goals that are identified on the basis of monitoring adolescents' computer addiction.

As part of monitoring the identification and evaluation of actions were carried out. This provided feedback, showing compatibility of the actual performance under the corrective and preventive process with its ultimate goals. Real-time monitoring is closely connected with all components of the model mentioned above.

In the present study, while monitoring the effectiveness of correction and prevention of computer addiction in adolescents students from orphanages and social shelters, as an aspect of monitoring there was adopted the formedness of non-addictive mindset and behavior among adolescents according to the following interdependent criteria: cognitive, value-meaningful and motivational, emotional and volitional, relational, activity-based and reflexive.

Cognitive criterion includes a wide scope of knowledge about the causes and specific symptoms of increased interest in computer, symptoms of computer addiction, methods of search, selection, application and control of the reliability of information resources of the Internet, understanding the positive aspects of using a computer, about information threat, about the dangers of sites with destructive and harmful content and virtual games based on violence, knowledge of opportunities to confront these threats in order to minimize the negative effects, as well as knowledge of methods of constructive alternative to a permanent computer pastime. In addition, the teenager should have the knowledge about how to prevent computer addiction and get help in solving this problem, to strive for continuous improvement of knowledge on the subject.

Value-meaningful and motivational criterion involves a conscious and balanced goal-setting, the orientation of teenagers to favorable interpersonal relationships and social interaction, the presence of affiliation motivation, positive life goals and motivation formedness to its achievement, value-meaningful attitude towards your own health, willingness to find a solution to the problems and its creative transformation on the basis of understanding of one's own activities in the information field of media space.

Emotional and volitional criterion implies adolescents' having high stress resistance, self-organization, emotional and volitional control of behavior, well-being and good mood, adequate emotional reaction to a computer and computer games, reduced anxiety and fear of self-expression, fear of incompatibility with others, mobility, empathic ability.

Relational criterion is assessed on the basis of the ability to establish and maintain interaction and cooperation with other people, the desire to create and keep on the basis of competence and responsibility a sense of mutual respect, acceptance, approval and interest, the ability to create and maintain a sense of mutual warm emotional relationship, manifestation of desire to feel oneself as valuable and meaningful personality, self-acceptance and acceptance of others.

Activity-based and reflexive criterion requires the ability for self-evaluation and a sustainable, positive self-esteem to prevent addictive behavior based on interpersonal and behavioral changes; ability for critical thinking and perception of the events and facts; the ability to predict the course of events; the desire for personal development and personal creativity development; achievement of the optimal level of social adaptation, life and self-confidence; ability to make decisions; self-control; willingness to take responsibility and to take decisive actions; the ability to listen and understand one's partner; the ability to build long-term partnerships in real life; having organizational skills and constructive communication; the ability to defend one's own view; the ability not to conflict; the ability to evaluate and distribute one's own stamina and energies; to allocate the time for using Internet resources rationally; readiness for analytical processing of information from Internet.

In order to improve the effectiveness of educational model on reducing and preventing computer addiction among teenagers (students of social institutions) there were identified specific organizational and pedagogical conditions, namely: considering the age peculiarities of teenagers (students of social institutions) and specific social and educational situation for their development; qualified and timely complex diagnosis of computer addiction and its causes in adolescents - students of social institutions, as well as monitoring the formedness of non-addictive mindset and behavior of adolescents; creation of humanistic educational environment in child-oriented institutions of social, psychological and pedagogical support as the potential to overcome the adolescents' computer addiction; the development and implementation of person-centered computer addiction correction model among adolescents in the educational process of social institutions; implementation of correctional program to reduce adolescents' computer addiction through optimum interaction of traditional and innovative forms and methods of pedagogical interaction based on three interrelated areas (activity, communication, self-awareness); comprehensive training of educators in the organization of the prevention and correction of adolescents' computer addiction, as well as the formation of teenagers' and educators' information culture.

The designed model is a realization of successive stages in the educational work, supported by a complex psychological and pedagogical technologies aimed at solving the problem of correction and prevention of teenagers' computer addictive behavior.

4. Discussions

In general, some methods of professional help for people suffering from computer addiction in Russia and the United States have much in common.

So, for the US and Russian experts there was used cognitive-behavioral approach in computer-addicted behavior correction, as well as the use of individual and group psychotherapy and training. However, in Russia there are currently no specialized clinics for the correction of computer addiction.

In Russia, unlike the Asian countries, the problem of computer addiction correction is not given due attention at the governmental level, but at the same time the humane forms of work are applied with computer addicts.

Among the main contemporary trends and approaches to correct computer addiction carried out in Russia, there are also used psychological training, forms and methods of correction pedagogy and psychotherapeutic method. Particular attention is paid to cognitive-behavioral therapy and therapy of family relations, and, if necessary, psycho-pharmacotherapy is applied as well.

Taking into consideration the positive Russian and foreign experience of solving the problem of computer addiction there were identified methodological bases, mechanisms, forms and methods of interaction of social institutions specialists and adolescents on the prevention and overcoming of computer addiction, that form the basis of pedagogical model of computer addiction correction and prevention in adolescents - students of orphanages and social shelters.

5. Conclusion

The developed and tested model of pedagogical correction and prevention of computer addiction in teenagers - students of social institutions on the premises of orphanages and social shelters of the Republic of Tatarstan of the Russian Federation, as well as organizational and pedagogical maintenance of these processes is one of the steps to address a very important and complex issue of our time - the formation of non-addictive personality.

In general, this model is focused on the formation of teenagers' personal target-oriented mindset to future implementation of life-sustaining activity with new personal results: total involvement in real life, acceptance of one's own personality as a value; mastering the skills of interaction with others, the perception of others in society as a value; the optimal use of information and telecommunication technologies; interest and responsibility in plans implementation; search for optimal forms, methods and ways to implement one's own activities for a better satisfaction of one's personal needs and interests.

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