

# Prevention of Teenager's Internet Addiction: Pilot Program

## Çocuklarda İnternet Bağımlılığını Önleme: Pilot Programı

**Guzel I. Gaysina**, *Bashkir State Pedagogical University named after M. Akmulla, Ufa, Russia, e-mail: nicomni9@yandex.ru*

**Venera G. Zakirova**, *Kazan (Volga region) Federal University, Kazan, Russia, e-mail: zakirovav-2011@mail.ru.*

**Abstract:** The relevance of the problem is caused by the rapid development of Internet-addiction of modern teenagers and young people as a form of addictive behavior. Necessity to start an earlier preventive work with children is recognized in the scientific and professional community as an important socio-pedagogical problem. The aim of the research is to develop and test a pilot program to prevent teenagers' Internet addiction. The authors present a model of psycho-pedagogical prevention of Internet-addiction for 10-15 year old pupils in school and family, as well as the results of the pilot program. A model of preventive work with children and parents, which includes target, content, technological and resultative components is theoretically developed and experimentally implemented. It is proved that the work of school teachers and psychologists on prevention of Internet-addiction should be carried out both with children and their parents on a particular program. This model was the basis for a pilot program aimed at: a) primary psychological and pedagogical prevention of internet-addiction of children; b) providing psychological and pedagogical assistance to parents in solving this problem.

**Keywords:** Internet-addiction, computer games, social networks, Internet-addicted children, Internet-addiction prevention.

## INTRODUCTION

### The relevance of research

In XXI century computers and Internet have become integral companions of human life. They are an inexhaustible source of information, communication and entertainment. However, one more serious problem of Internet-addiction has added the list of psychological and pedagogical problems of mankind. Young people aged 10-18 present the main risk group for the worldwide development of this socio-pedagogical disease. Computer games, social networks, web sites, entertainment portals influence their weak psyche, sub consciousness and soul. Internet is a huge peculiar world where you can find the best and the worst without any hierarchy or graded by an unknown person (Cao, Kirilova & Grunis, 2017; Chen et al., 2017; Khruluova & Sakhieva, 2017; Lin, Sokolova & Vlasova, 2017; Yarullin, Prichinin&Sharipova, 2016). In the information society Internet becomes an active factor of socialization of children. But it is very difficult for them to orient in information flows and Internet opportunities, its risks and dangers. Negative contents, blackmail and fraud, pornography and harassment, ribaldry and cyberbullying – this is the list of threats faced by young users.

The term «Internet Addiction Disorder — IAD» is widely used not only in scientific literature. The author mentions the problem of Internet-addiction as a generalized concept, defined as non-chemical addiction to usage of Internet. It is an intrusive desire to enter Internet and inability to get out of it. Analysis of scientific literature and the results of primary diagnosis of sample have allowed us to define the following criteria of Internet-addiction of children: the amount of time spent at the computer and on the network; a number of friends in real life and in social networks; health status; emotional status; forms of spending free time. The most important are the following indicators of Internet-addiction: user's activity, the content of Internet activity, the experience of collision with online risks and general idea of Internet security.

The prevention of Internet-addiction is an actual problem due to its social and personal significance (avoiding real life and communication, psycho-physiological disorders, adoption of destructive ideas in some contents etc.). The urgency of the problem consists in the need to resolve the following contradictions at socio-pedagogical, theoretical and methodical levels: between the social need in healthy generation and lack of scientific and practical developments of effective

methods to prevent the formation of Internet-addiction, psycho-physiological disorders and social deviations.

Scientists and specialists are seriously concerned about the problem of early addiction to social networking sites (Griffiths, 1998; Kimberly Young, 1998; Soldatova, 2011; Voiskunsky, 2000) and ways to overcome it (Balloon, 2002; Baron, 2016; Buelga, 2012; Egorov, 2007; Sava, 2011). A number of authors paint a very lively portrait of a man, whose formation to a large extent is determined by digital technology, relying on the experience of the most advanced countries in the media "democratization", on the modern scientific research and opinions of the best French and international experts (Kerdellan & Greziyon, 2006).

The problem of children and adolescents security in a social network is recognized as the important problem of our time (Kappas & Kramer, 2011; Perry & Olsson, 2009; Young, 1998;). The researchers also took up the study of a new problem - cyber bullying (Baron & Buelga, 2016; Glazman, 2009). A new aspect of the problem becomes an object of special studies - discriminatory Expressions in Social Networks (Duenas & Ponton, 2016). Scientists are actively discussing the role of parents to ensure children's safety and the competence of teachers in the use of modern information computer technologies (Baron, 2016; Fernandez-Cruz, Fernandez Diaz, 2016; Pankova, 2009; Zotova, 2011). J. Suler (2014) recognizes the existence of the problem of Internet addiction, notes its development from an unacknowledged to evident. He stated the need of psychological support.

The phenomenon of multimedia is universal. None of the developed countries has passed it. 24 billion dollars are spent on video games worldwide each year and this sector is growing by 15% per year. Unfortunately, video games have not become the object of special studies and the scientific opinions about the violence generated by them vary widely.

Internet addiction problem is interdisciplinary in nature because it involves those who know what addiction is. Those are psychiatrists, drug treatment specialists, clinical and medical psychologists. Teachers, psychologists and social workers have been involved to solve this problem in recent years too. The transition from normality to pathology, the development of addiction is a subject that requires a collaborative discussion to warn the public, parents and teachers. Our main task is to focus specialists' attention on prevention, so that the condition of internet-addiction is not developed. The main ideas of developers of preventive programs in the USA, Germany or Russia are connected with the formation of not only computer literacy, but also computer culture; providing teenagers with alternative activities; strengthening of parental control over the regime of children's day; advisory work with parents etc.

Children and adolescents are users. At the same time manufacturers take market demand into account very well and produce their goods. So they offer educational and informative games for young children. Teenagers are deeper involved in this world. They participate in virtual games, and we always say: we must understand what is presented in these games, because it is often aggression, erotization, early sexualization.

However, scientific debates on the essence of Internet-addiction and the proposed approaches and recommendations don't allow us to find effective ways to solve this problem. We share the position of the majority of scientists who emphasize the greatest relevance and effectiveness of prevention of Internet-addiction at the early stages of their passion. They rightly state that school and family play a leading role in this process. That is why the aim of our study was to develop and realize a pilot prevention program for pupils and their parents, to prove the effectiveness of used forms and methods. We consider that the essence of the prevention of Internet-addiction is to reveal the degree of propensity and then to reduce the possibility of the beginning of computer-games and social network addiction. Such work should be aimed at child's consciousness and his patterns of behavior. Besides, the psychological and pedagogical work with parents plays an important role in this preventive work.

## METHOD

### Research methods

The research of Internet-addiction prevention is based on leading principles of cultural and axiological scientific approaches. They are: consideration of the object as a cultural phenomenon; accounting of subjectivity of cultural development; transformation of the social values through the inner world of a person, entering into psychological structure in a form of personal value orientations.

Our research was based on a hypothesis that the effective Internet-addiction prevention is determinate by the following psychological and pedagogical conditions:

- beginning of the preventive work at the stage of weak interest of younger adolescents in computer and on-line games;
- development and realization of the pilot program, adapted to the concrete groups of children at different stages of Internet-addiction;
- strengthening of personal resources of adolescents that can prevent the development of self-destructive behavior;
- teaching the parents the behaviors with children with the symptoms of dependence on computergames and social networks;
- information and communication culture education.

The content of preventive work, as reflected in the model, has been implemented with the pupils of 5-9 classes and their parents in the pilot program. During our research the following diagnostic methods were used: analysis, comparison, questionnaires, interview, included observation and modeling. At the forming stage of the research we used the following educational forms and methods: conversation, educational debate, training, exercises, explanation, persuasion, meaning search dialogue, role-playing, role positions modeling, etc.

### Experimental research base

340 adolescents of 5-9 classes aged 10-15 were involved in the pilot program. They were pupils of 12 public secondary schools of different cities and villages in Bashkortostan. 156 parents, 35 social pedagogues and school psychologists have participated in experimental preventive work. Bachelors and masters of Bashkir State Pedagogical University have also taken part in the pilot program as volunteers.

The sample was presented by the pupils of basic schools for students' training practice. The author implemented the general scientific guidance. The concrete classes were chosen by Head Masters in accordance with the experimental program. The reasonable choice of age of the pupils was made. The pupils of 5-6 classes are usually addicted to computer games and need in primary preventive work. At the same time the most of adolescents of 7-9 classes are located in social networks of different contents. Some of them need secondary prevention and individual professional helping.

### Stages of research

The research was conducted in three stages according to the logic of scientific research:

1. The first (preparatory) stage - the current state of the problem in psychological and pedagogical literature and practice was being analyzed; diagnostic methods to identify levels of Internet-addiction were chosen; the pilot program with the sample was being developed;
2. The second (forming) stage - theoretical model of Internet-addiction prevention was developed; the experimental work concluding the realization of the model and the pilot program in schools with the sample was being carried out. This stage also included and preventive work according to our hypothesis;

3. The third (resultative) stage – the final diagnostics and analysis of the research results were held; the conclusions were drawn; practical recommendations for school teachers and parents for Internet-addiction prevention were developed.

## **RESULTS**

### **Structure and content of model**

Model of Prevention of Teenager's Internet Addiction was developed. We relied on the analysis of current state of the problem and the results of our diagnostic stage of research. This model includes target, content, technological and resultative components. The target component is represented by the goal of preventive work. It is the elimination of the causes and factors that facilitate the transition of teenagers to the next stage of Internet-addiction.

We defined the following tasks of our experimental work: to expand their perception of benefit and danger of communication with Internet; to strengthen the personal resources of a child; to develop social skills; to form constructive behavior models of parents of Internet-addicted children; to hold a number of consultations of IT-teachers on this problem.

The content component of our model included the program of all participants in the preventive work with pupils and parents. The content of the experimental work was divided in two parts: preventive work with pupils and consultatory work with parents. Besides, methodical work with IT-teachers was planned. The experimental work with children implied educational, informative, gaming and other forms of activities. The experimental work with parents included consultations, trainings, and lectures about signs of Internet-addiction and its stages.

The technological component of the model included different forms, methods, and technologies of experimental preventive work with children and parents. They are practical, verbal, gaming and creative forms and methods in dependence of children's age.

The resultative component of the model is presented by the expected results of the pilot preventive program. They are elimination of the causes of Internet-addiction and exclusion of a child's transition to other and more dangerous stage.

In our research the following stages of Internet-addiction development were defined:

- 1) lack of interest;
- 1) weak interest;
- 2) strong interest;
- 3) passion;
- 4) addiction.

We state that the signs of Internet-addiction are the same as that of the chemical dependency. The dynamics of its development: pleasure from the interaction with the object of the addiction; then – attraction to it; passion for this environment with loss of time control; loss of semantic content (according to the principle «no matter what, if only the Internet»); ignoring all other kinds of activities; a full «diving to the bottom» of Internet; signs of desocialization; loss of contact not only with other pupils but also parents. Last stage is characterized by change of the psychological content of a person generally. It is the longest and most destructive stage. It can last a lifetime if the specialists intervene. But in this case the correction of addictive behavior will be difficult and prolonged.

### **Stages of implementation of the model**

Implementation of the model of adolescents Internet-addiction prevention took place in three stages of experimental work.

First stage. Diagnostics of stages of passion or Internet-addiction of pupils from 5-9 classes; identifying the causes and factors of passion or addiction; diagnostics of types of parental behavior

towards their children who spend a lot of time at the computer. We determined psychopedagogical approaches to the development of the content of a prevention program at this stage.

Second stage. Implementation of the model of Internet-addiction prevention in the form of a pilot program with the students, parents and teachers; verification of the hypothesis.

Third stage. Control diagnostics of stages of passion or Internet-addiction of pupils from 5-9 grade; formulation of conclusions and recommendations.

### **Ascertaining stage**

Diagnostics of stages of involvement of younger, middle-aged and older adolescents in Internet was carried out on ascertaining stage of the experiment (computer games, social networks, chat rooms, etc.). Teens were divided into groups after the diagnostics. The differentiated preventive work was planned for each of them at the next stage. The main problems of raising children were identified at this stage. The solution of these problems are of great difficulty for parents. The basic models of incorrect behavior of parents whose children spend a lot of time at the computer were identified. Specially designed questionnaires and interviews with pupils and their parents were used to collect information. The questionnaire included 30 questions of sociological and psychological orientation. It contained 3 blocks of general questions aimed at: 1) identification of features of using computers and Internet at school and home; 2) definition of interests of teenagers; 3) identifying representations about online risks and awareness of Internet safety. The program included well-known empirical diagnostics instruments (for example, the method of determining Internet-addiction by Kimberly Young (Young, 1997) and specially developed author methods.

Questionnaire for parents was used to identify the attitude of parents towards their children's passion for computer, methods of control over their children's behavior in the network, parents' knowledge about Internet risks and models of their behavior.

Results of this stage have confirmed a scientific fact that pathological dependence on social networking and gaming is a subject to teens. It becomes difficult to communicate during the period of hormonal changes of their body, to make new acquaintances, to establish contacts with the opposite sex. That is why they have the desire to get away from everyday worries and problems in virtual reality, thereby improving their emotional well-being.

The results of the primary stages of diagnosis of Internet-addiction of pupils from 5-9 grades. 18,9% of pupils from 5<sup>th</sup> grade don't have any passion for computer according to the empirical data of 53 pupils. 66,0% of pupils are at the stage «weak interest»; 15,1% - at the stage «strong interest». No signs of Internet-addiction were identified.

48 pupils of 6<sup>th</sup> grade: all of them have signs of interest in computer; "weak interest" – 47,9%; the number of pupils at the stage of «strong interest» have increased significantly – 52,1%. Signs of internet-addiction or passion have not been fixed.

From 74 pupils of 7<sup>th</sup> grade none of them are marked as "don't have any passion for computer"; 37,8% of pupils are at «weak interest» stage; 62,2% - at the stage of «strong interest». Signs of internet-addiction or passion have not been recorded.

There have been changes at the stages of Internet-addiction of 86 pupils from 8<sup>th</sup> grade (older adolescents). At the stage of "weak interest" – 30,2%; "strong interest" – 47,7%; 22,1% of pupils are at the stage of passion. From 79 pupils of 9<sup>th</sup> grade: 45,6% are at the passion stage; 54,4% - at the stage of video games and social networks addiction.

The pupils have marked the main reasons of passion (affection) for computer programs and computer games: "no one to talk"; "nothing to do"; no other hobbies and interests; need for game; excitement; the desire to learn new things; desire to communicate; the ability to transform; desire to take a break from studies; forget about problems at school or home; "it is more interesting than life" etc.

Results of primary diagnostics of pupils indicated that the majority of younger teenagers are normal computer users and they are still at the «weak interest» stage in computer games. Stable need for the game has not been formed at this stage yet. The game is not a significant value for them yet. There is a real opportunity to get children back to real life and the correct mode of the day at this stage. Preventive work is of urgent necessity at this stage.

Pupils of middle adolescence are at the stage of strong interest for computer games and social networking. At the same time, the transition to the older adolescence coincides with the stages of «passion» and «addiction». There is a new demand in the hierarchy of needs - playing computer games and social networks. These kinds of games and activities are taking systematic character. Secondary prevention takes a particularly important place at this stage.

67% of teenagers whose Internet surfing has become a habit, show concern about the impact of network on their family life. Their time spent on communication with their parents is rapidly shrinking. At the same time the results of the survey and interviews with parents indicated that in spite of the fact that teenagers spent more than 4 hours per day at the computer, many of them were not fully detached from the external environment, their school and household duties. Psychic and somatic disorders were not observed. This fact indicates the possibility of weakening the Internet-addiction by using of preventive work by professionals and parents.

### **Forming stage**

On the forming stage of our research the pilot preventive program for pupils of 5-9 classes and their parents was tested.

Our research was based on a hypothesis that the effective Internet-addiction prevention is determinate by the following conditions: taking the stages of the child's Internet involvement into consideration; simultaneous educational work with both parents and children; strengthening of personal resources of a child.

The experimental program included special developmental and educational activities that gave knowledge and skills for successful Internet-addiction prevention to parents and their children. The program consisted in 5 lessons of enlightening and preventive character. They were «Computer: pros and cons», «Let's talk», «My attitude to Internet», «How to make a refusal», «Threats in social networks». They were called to form the independent settings among peers according to general education standards, which call for the promotion of a healthy lifestyle. The pupils composed and discussed the clusters «The real world and the virtual world», read and discussed the story «In captivity at the computer», were playing the games «Truth or lie», «Refusal» etc.

In these lessons pupils learned to distinguish positive and negative sides of virtual and real life; to see the dangerous impact of the Internet on physical and mental health; to understand the motives and emotions of virtual interlocutors; to communicate constructively in real life; skills of confident behavior, reasoned refusal in the situation of choice. This program included such forms of work as conversation, exercises role play, discussions, training, viewing and discussing videos. These lessons took into account age and psychological features of children. They were conducted with the whole class with a priority focus on children at risk.

This program has been realized by school teachers, social teachers and psychologists in 12 schools. Debates, lectures, discussions of educational films, training, developing exercises, creative and sports games with teenagers of different classes were held. Their parents have participated in various thematic lectures, consultations and discussion seminars. They studied different behavior models towards their children who were spending a lot of time at a computer. Their attention was paid on the important skill – to alter the child's attention to other activities.

**Table 1.** Results of final diagnostics of Internet-addiction stages of pupils, in percentage terms

Stage of addiction	Class				
	V	VI	VII	VIII	IX
Lack of interest	18,9	-	-	-	-
Weak interest	66,0	49,9	56,8	34,7	-
Strong interest	15,1	50,1	43,2	51,7	-
Passion	-	-	-	13,6	60,8
Addiction	-	-	-	-	39,2

### Resultant stage

Approbation results of a pilot program for preventing Internet-addiction with pupils and parents were summarized at this stage. It was determined that the implementation of the various forms and methods of preventive work allowed to restrain the growth of adolescents who could move to the next stage of addiction. Despite the fact that older adolescents did not abandon their passion for systematic playing computer games, they were able to start controlling their day regimen and change their activities. We managed to remove the signs of internet-addiction of 8<sup>th</sup> grade pupils due to a good parental behavior, who mastered the new behaviors.

### DISCUSSION

The problem of addictive behavior of children is widely represented in Russian psychological and socio-pedagogical science (Galaguzova, 2009; Gilinskiy, 2007; Zmanovskaya, 2003). However, addiction on computer games and social networks has not been included in the list of addictions with their negative psychological and social consequences for a person and society for a long time. We agree with the scientists who mark that there are no clear criteria for Internet-addiction nowadays, so that why it is difficult to classify it as an independent form of addiction. Nevertheless, we defined the following criteria of Internet-addiction: the amount of time spent at the computer and on the network; a number of friends in real life and in social networks; health status; emotional status; forms of spending free time.

Our research has showed that Internet-addiction in its characteristics and effect on the consciousness and behavior of children can be legally classified as a non-chemical addiction. Children with signs of passion, affection and dependence on Internet need of professional help as well as their parents.

The problem of Internet-addiction attracts attention of different scientists in recent years (Egorov, 2007; Soldatov, 2014; Voiskunsky, 2004). Experts refer the dependence of children on computer games to serious emotional disorders, specific emotional addiction. A number of scientists studied a complex problem in addition to existing one – addiction on social networks which covers a much larger number of young people and has severe psychological and social consequences. However, despite the large number of scientific articles and studies on the topic, the problem of effective prevention of this kind of addiction is still not studied. This issue needs further comprehensive experimental study. The results of our pilot program have proved the effectiveness of such forms and methods as training, educational conversation, role-playing game, watching videos, discussions. They restore and develop positive interests of children and constructive communication skills.

Taking into account the age characteristics of children and the contemporary realities, it is possible to assert that the prevention of severe forms of possible addictions on social networks should begin in childhood when a child begins to communicate with a computer by means of computer games.

To prevent the development of addictive behavior it is necessary to form a personal additive resistance, to develop a sense of proportion when working with a computer, basic social skills and knowledge of positive traits and dangers of Internet.

## CONCLUSION

The article aims to present the content and pedagogical means of preventive activity in the problem of Internet-addiction. The author has developed a model of Internet-addiction prevention. The criteria that allow us to determine the degree of teenagers' Internet-addiction have been defined. Our research was based on a hypothesis that the effective Internet-addiction prevention is determinate by the following conditions: taking the stages of the child's Internet involvement into consideration; simultaneous educational work with both parents and children; strengthening of personal resources of a child. The hypothesis has been confirmed.

It was proved that early detection of signs and causes of Internet-addiction enables to conduct timely preventive work and to protect children from negative effects of overreliance on computer and social networks.

It was stated that the model of Internet-addiction prevention realized at early stage in school and family allows to eliminate some of its main causes and factors. It becomes possible to reduce risks of complications in the mental and physical health of children, to improve the psychological literacy of parents in this problem. Any kind of prevention expects, first of all, the elimination of the causes of different deviations in the person's development. That is why preventive work will be effective on condition that the parents, teachers and psychologists know and comprehend the real causes and factors of a child's overreliance on compute. They master of prevention forms and methods at any stage. At present the only tried method of Internet-addiction prevention is passion for activity that is not associated with the frequent using of computers it does not become a substitute for real life. The easiest and the most accessible way to escape any kind of addiction is to get another addiction. Communion with nature, creative hobbies, living companionship, sports and healthy life style can help to withdraw children from addiction.

---

**Acknowledgements:** The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University.

## REFERENCES

- Arestova, O. N., Babanin, L. N., & Voyskunsky, A. E. (1996). Communication in Computer Networks: Psychological Determinants and Consequences. *Vestnik MSU*, 14, 14-20.
- Baron, O., Buelga, S., & Cava, M. (2016). The Influence of School Climate and Family Climate among Adolescents Victims of Cyberbullying. *Comunicar*, 46(XXIV), 57-65.
- Babaeva, U. D., Voyskunsky, A. E., & Smislova, O. V. (2000). Internet: Impact on a Person. Humanities Researches in Internet. Ed. by Voyskunsky A.E. Moscow: Moscow State University.
- Balonov, I. M. (2002) Computer and Teenager. Moscow: Eksmo.
- Cao, Y., Kirilova, G. I., & Grunis, M. L. (2017). Cooperative Research Projects of Master's Students (Education Programs) in the Open Informational Educational Environment. *EURASIA Journal of Mathematics, Science and Technology Education*, 13(7), 2859-2868.
- Chen, F., Gorbunova, N. V., Masalimova, A. R., & Bírová, J. (2017). Formation of ICT-Competence of Future University School Teachers. *EURASIA Journal of Mathematics, Science and Technology Education*, 13(8), 4765-4777.
- Chudova, I. (2002). V. Particular Qualities of «I» Image of Internet Inhabitant. *Psychological Journal*, 22(1), 113-117.
- Derks, D., Fischer, A. H., & Bos, A. E. (2008). The Role of Emotion in Computer-mediated Communication: A Review. *Computers in Human Behavior*, 24(3), 766-785.
- Duenas, D., & Ponton, P. (2016). Discriminatory Expressions, the Young and Social Networks: The Effect of Gender. *Comunicar*, 46(XXIV), 67-75.
- Egorov, A., Kuznetsova, N., & Petrova, E. (2005). Personality Characteristics of Adolescents with Internet-addiction. *Questions of Children and Adolescents Mental health*, 5(2), 20-27.
- Egorov, A. U. (2007). Non-Chemical Addictions. Saint Petersburg: Rech.
- Fernandez-Cruz & Fernandez Diaz (2016). Generation Z's Teachers and their Digital Skills. *Comunicar*, 46(XXIV), 97-105.
- Gilinsky, J. I. (2004). Deviantology. Saint Petersburg: Legal Center Press.



- Glazman, O. L. (2009). Psychological Features of Participants of Bullying. *News of Russian State Pedagogical University named after A.I. Gertsen*, 105,159-164.
- Griffiths, M. (1999). Internet Addiction: Fact or Fiction? *Psychologist*, 12(5), 246-250.
- Griffiths, M. D. (2002). *Gambling and Gaming Addictions in Adolescence*. Leicester, UK: British Psychological Society/Blackwell.
- Griffiths, M. D. (2007). *Gambling Addiction and its Treatment within the NHS: A Guide for Healthcare Professionals*. London: British Medical Association.
- Kappas, A., & Krämer, N. C. (Eds.) (2011). *Face-to-face Communication over the Internet: Emotions in a Web of Culture*. Cambridge: Cambridge University Press.
- Kerdellan, K., & Grezizon, G. (2006). How Internet and Video Games are Forming Tomorrow's Adults. Tr. from French. Ekaterinburg: U-Facroria.
- Khrulyova A. A., & Sakhieva R. G. (2017). Forming of Informational Culture as a Necessary Condition of the Level Raising of Higher Education. *Man In India*, 97(15), 211-225.
- Küster, D., & Kappas, A. (2014). Measuring Emotions in Individuals and Internet Communities. In T. Benski & E. Fisher (Eds.), *Internet and Emotions*. New York: Routledge.
- Lin, K., Sokolova, A. N., & Vlasova, V. K. (2017). Methodological Potential of Computer Experiment in Teaching Mathematics at University. *EURASIA Journal of Mathematics, Science and Technology Education*, 13(7), 3539-3552.
- Pankova, T. V., & Sergeeva, N. B. (2014). Research of Internet Addiction of Adolescents. *Modern Pedagogics* 5(18) <http://pedagogika.snauka.ru/2014/05/2328>
- Perry, B., & Olsson, P. (2009). Cyberhate: the Globalization of Hate. *Information & Communication Technology Law*, 18(2), 185-199.
- Smahel, D., Brown, B.B., & Blinka, L. (2012). Associations Between Online Friendship and Internet Addiction Among Adolescents and Emerging Adults. *Developmental Psychology*, 48(2), 381-388.
- Soldatova, G. U., & Rasskazova, E.I. (2014). Teen Safety in Internet: Risks and Parental Mediation. *National Psychological Journal*, 3(15), 39-51.
- Soldatova, G. V., Zotova, E. U., Chekalina, A. I., & Gostimskaya, O. S. (2011). Caught in One Net: Socio-psychological; Research of Children and Adults Ideas of Internet. Moscow: Moscow State University.
- Suler, J. (2014). The Psychology of Cyberspace. URL: [www.rider.edu/~suler/psycyber/psycyber.html](http://www.rider.edu/~suler/psycyber/psycyber.html)
- Symposium «Internet-addiction: Psychological Nature and development dynamics» (2009). Moscow: Moscow State University. URL: <http://www.psy.msu.ru/science/conference/internet/2009/brief.html>.
- Voyskunsky, A. E. (2004). The Actual Problems of Internet-Addiction. *Psychological Journal*, 25(1), 90-100.
- Voyskunsky, A. E. (2000). Phenomenon of Internet-addiction / Humanitarian Researches in Internet / Ed. by Voyskunsky A.E. Moscow: Moscow State University.
- Yarullin, I. F., Prichinin, A. E., & Sharipova, D. Y. (2016). Risk Management of an Education Project. *IEJME - Mathematics Education*, 11(1), 45-56.
- Young, K. (1996). Internet Addiction: The Emergence Of a New Clinical Disorder. *Cyber Psychology and Behavior*, 1(3), 237-244.
- Young, K. (1998). *Caught in the Net: How to Recognize the Signs of Internet Addiction and a Winning Strategy for Recovery*. New: York Wiley & Sons.