

Experimental study of correction of addictive behavior of teenagers in the Internet environment

Rezida Akhatovna Fahrutdinova, Iskander Engelevich Yarmakeev, Rifat Rifovich Fahrutdinov

Kazan Federal University, Institute of Philology and Intercultural Communication, Kremlyovskaya Street, 18,
Kazan, 420008, Republic of Tatarstan, Russian Federation

Abstract. This article performs a theoretical justification of problem of teenagers' addictive behavior in Internet environment. The authors of the work represent a multiple number of psychological and pedagogical researches of modern schoolchildren's addictive behavior manifestation. The scientific research includes the careful analysis of domestic and foreign investigators on this problem. Theoretical provisions of research are confirmed with experimental work results. Within a pilot study the authors have managed to realize its purpose of theoretical justification and experimental study of correction of teenagers' addictive behavior in Internet environment.

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Introduction

Sociocultural and socioeconomic conditions of society development, innovative processes in education system development have essential impact on the content and nature of modern schoolchildren's socialization. In dynamically developing world social formation of modern schoolchildren happens in the conditions of multiple-factor social environment [1].

Pedagogical ensuring of schoolchildren identity socialization represents possibility of acquisition socially and personally significant experience of development and transformation of surrounding reality on the basis of cognition of activity and communication methods and also interiorization of social relations [2].

Therefore in these conditions social pedagogy as the special area of pedagogical knowledge develops questions of social formation of schoolchild's identity in the conditions of macro-micro- and meso-environment [3].

One of the dominating factors that influence on schoolchildren is Internet environment which changes teenagers' behavior and brings to Internet addiction.

Addictive behavior – is one of deviant behavior types characterized by increasing aspiration to escape from reality with the help of artificial transformation of the mental state by means of some substances or constant concentration on certain kinds of activity [4].

Among the main groups of addictive (deviating) behavior C.P. Korolenko and T.A. Donskih L.G. Leonova, N.L. Bochkaryova distinguish the following : antisocial (delinquent), asocial (immoral), autodestructive (self-destructive) behavior [5].

Within psychological approach various typology of addictive behavior are used. Yu.A. Kleyberg picks out three main groups of behavioral deviations: negative, positive and socially neutral [6]. In the first case it is the use of psychoactive substances, in the second – social creativity, and in the third - begging.

While foreign researchers in their majority consider addiction to be a dependence synonym and addictive behavior a synonym of dependent behavior, in domestic literature the addictive behavior means behavior violation without physical and individual psychological dependence.

According to many researchers teenage age is a risk factor for addictive behavior development, one of which forms is Internet dependence.

Internet-addiction (Internet dependence, virtual addiction, cyber-addiction, netagolizm) as an independent form of nonchemical dependence was allocated abroad in the late eighties, in Russia - since the end of the 90th years. It is established that this is unreasonable, frequently not surmountable and pathological inclination to Internet use that are harmful to psychological and physical health and negatively influencing interpersonal relations.

Addiction is shown by aspiration of the subject in any way to withdraw from reality changing one's mental state. All available problems an addict postpones "for later" to have more comfortable mental state at the moment. Short-term addictive behavior to some extent can be shown practically by any person (the use of alcoholic beverages, drugs, gambling, workaholism and so forth). But when the aspiration to escape from reality, connected with mental state changing, starts to dominate in consciousness and leads to separation from reality the addiction gains pathological character. The person

not only steadily avoids the solution of important problems, but moreover stops in the personal development/

Materials and methods

So the problem of schoolchildren's Internet - safety in the conditions of modern Russian education gains special importance. In this case it is condition of security when there is no risk that information cause harm to their health and to physical, mental, spiritual and moral development [7]. According to various researches, nowadays about 10% of users all around the world are Internet addicted. Despite of the fact that there is no official recognition of a problem in Russia, Internet dependence is already taken into consideration in many countries of the world.

In such conditions the search of effective preventing and correction methods of addictive behavior in Internet environment is activating.

The basis of our research is formed by contradiction between:

- increasing need of assistance to teenagers that pathologically use Internet and insufficient readiness of special correctional and preventive programs of Internet-addiction.

- need of prevention and correction of teenagers' addictive behavior and uncertainty of their personal qualities with which Internet dependence is connected.

According to aforesaid, the thesis subject was defined: "Correction of teenagers' addictive behavior in Internet environment".

The foregoing has caused a **research problem**: how it is possible to organize productively preventing and correction of teenagers' addictive behavior in Internet environment.

The object of the research is: Internet addiction of teenagers.

The subject of the research: correction of Internet addiction of teenagers.

The aim of the research: theoretical justification and experimental study of correction of the problem of teenagers' addictive behavior in Internet environment.

The hypothesis of the research is: correction of teenagers' Internet addiction can be successfully carried out in the following conditions:

- using of complex diagnostics of the personal sphere and the environment of teenagers' activity, that allows pointing out reasons of Internet addiction;

- providing development and deployment of teenagers' Internet addiction correction and prevention program;

- carrying out organization of psychological education for teenagers, their parents, teachers devoted to prevention of Internet-addiction.

According to the purpose and hypothesis of research the following **research tasks** are defined:

1. To reveal teenagers' Internet addiction theoretical aspects in domestic and foreign psychology.

2. To detect factors of emergence and special features of teenagers' Internet addiction.

3. To fetch out psycho-pedagogical conditions of teenagers' Internet addiction correction and to prove their efficiency experimentally.

The experimental work which has been carried out by the authors included three stages: stating, forming and control. Within experimental research the complex of various methods and techniques were used.

Methods and techniques of research

- Theoretical: theoretical-methodological analysis of the research problem; analysis of psychological and pedagogical literature on the characteristics of teenagers and their addictive behavior in Internet.

- Empirical: participant observation, psychodiagnostic Methods of mathematical statistics using t student criterion to assess the validity of the differences between the two comparable groups of data (using automatic calculation and interpretation of the results of psycho-diagnostics).

- Experimental: psychological - pedagogical experiment (Asserting, forming and control steps).

Methods of research

- "Behavior in Internet," A. Zhichkina's scale for investigation of teenagers' addictive behavior in Internet;

- Method "Incomplete sentences " developed by A.E. Zhichkina and E.A. Schepilina, aims to identify subjective attitude of respondents to Internet,

- Methodology Dembo-Rubinstein diagnoses self-esteem and level of aspirations of respondents);

Results

We conducted a pilot research to identify manifestations of teenagers' addictive behavior in Internet environment.

To investigate teenagers' addictive behavior at a stating stage of experiment the questionnaire "Behavior in Internet", developed by A. Zhichkina; technique "Incomplete sentences", developed by A.E.

Zhichkina and E.A. Shchepilina and directed on identification of subjective relation to Internet; Dembo-Rubenstein's technique of diagnostics of self-assessment and level of respondents' claims were used.

As a result of Internet addiction research (A. Zhichkina's scale) and technique "Incomplete sentences" in experimental selection the group of addicts (inclined to Internet dependence) and non-addicts (not inclined to Internet dependence) have been identified [8].

Thus 40 respondents (35%) of experimental selection have Internet addiction. The lowest level of inclination to Internet addiction was revealed for 65 people that is 56%. Besides 10 people (9%) of experimental group don't have inclination to Internet addiction. The absolute Internet dependence (6-7 points) wasn't shown by any of examinee. Thus, during the research two groups of teenagers: 40 people (35%) inclined to Internet addiction and 75 people not inclined to Internet addiction have been identified that is 65%.

During experimental work with schoolchildren inclined to Internet addiction (40 people) with the help of generation method of random numbers they were divided into 2 groups: (20 people) experimental and control (20 people). Distribution was carried out so that between values of studied indicators in these groups there were no significant distinctions. The individual code was assigned to each examinee.

For the purpose of comparative analysis of self-assessment and level of claims Dembo-Rubenstein's technique was carried out. As a result of research in studied experimental and control groups insignificant distinctions in levels of self-assessment and claims were distinguished.

Thus, 10 people (50 %) in experimental group and 12 (60 %) people in control group showed low level of self-assessment that is an adverse indicator for personal development. Respondents of these groups can have problems during self-determination of the personality. Because of underestimation of one's opportunities and inability to set oneself not only difficult but also rather simple tasks there can be difficulties in studying.

The average level of self-assessment was shown only by 1 person (5%) in control group. Four people (20%) in experimental group and 3 people (15%) in control group have high level of self-assessment. And the overestimated level of self-assessment was shown by 6 people (30%) in experimental group that is 10% more than among respondents of control group.

Quantitative indices of claims level also have insignificant distinctions in these groups. Thus,

low level of claims is shown by 13 people (65%) in experimental group that is 5% more than among examinees of control group. This fact represents a negative indicator for personal development. Problems in studying because of potentials underestimation and inability to establish problems of various difficulties are probable. Only 1 person in experimental group has average level of claims that is 5% more in comparison with indicators of control group. The high and overestimated levels of claims was shown by identical number of respondents in these groups and made 25%.

Thus, the analysis of results of Dembo-Rubenstein's technique has shown that the main part of respondents in experimental and control group have low levels of self-assessment and claims [9], [10].

The correlation analysis has shown:

Analyzing correlations it is possible to claim that the main characteristics on which significant distinctions between experimental and control group were received to the same extent were shown in interrelation with Internet addiction.

Between Internet addiction and indicators of self-assessment level according to Dembo-Rubenstein's technique the negative correlation significant links on indicators (appearance and confidence) were revealed.

For the purpose of implementation of system work on pedagogical modeling of Internet addiction correction, we have defined initial positions. We have noted key provisions of each basis of pedagogical conditions allocation:

1) teenagers' specialities that define inclination to addictive behavior: physiological features of forming organism, social immaturity, insufficient ability to predict and control one's actions and be responsible for them, increasing aspiration to independence.

2) essential attributes of addictive behavior – existence of behavior stereotype, its deviation from the established norms and behavior standards, mainly negative consequences of this behavior type (personally).

3) theoretical knowledge and practical abilities of teachers to conduct correctional work, formation among teachers an accurate installation for work with teenagers-addicts.

Pedagogical approach to addictive behavior correction explains the risk of addictive behavior emergence among teenagers by inclination to addictions, pedagogical neglect, gaps of parental education, weak self-organization of teenagers.

In the presented model of Internet-addiction correction for teenagers the implementation of various types and forms of subjects' activity in specially organized social and psycho-pedagogical

space is provided. For this purpose we carried out a complex of psychological training means (visualization, relaxation, accommodation of roles) and pedagogical actions (subject and role-playing games, lectures, discussions, round tables, class hours organizing, conversations, seminars, practical trainings); gave opportunity to choose various types of practical activities.

We have defined criteria of formation teenagers' behavior free from Internet addiction.

The value criterion assumes the realized and suspended goal-setting, teenagers orientation on favorable interpersonal relations, valuable relation to health, readiness for search of arising problems solution, their creative transformation on the basis of comprehension of one's activity in Internet information field.

The adaptation criterion means that teenagers have high resistance to stress, adequate perception of criticism, good health and mood, cheerfulness, healthy ambition, mobility, high operability, self-confidence, steady and positive self-assessment, understanding and division of I-images.

The communicative-organizing criterion includes skills to listen and understand interlocutors, sincerity, capacity to build long-term partnership and confidential contacts in real life, ability to argue one's point of view, non-conflict, empathetic, real estimation and distributing of one's forces.

The reflexive criterion is estimated according to capacity of introspection, knowledge of one's advantages and disadvantages, ways of their use and compensation, ability of critical judgment and perception of events and facts; skill to predict succession of events.

The program "Prevention and correction of teenagers' Internet addiction" is a complex of trainings for personal sphere development for teenagers with addictive behavior in Internet environment and methodical recommendations on prevention of computer dependence for schoolchildren's parents and teachers. For this purpose the formation of psychologically comfortable atmosphere as conditions for personality self-development is necessary.

Pedagogical approach to addictive behavior correction explains the risk of addictive behavior emergence among teenagers by inclination to addictions, pedagogical neglect, gaps of parental education, weak self-organization of teenagers. It is necessary for teachers to own theoretical knowledge and practical abilities to conduct correctional work.

At a forming phase of experiment we were implementing the program "Prevention and correction of teenagers' Internet addiction" on the following stages:

- creation and realization of the program "Prevention and correction of teenagers' Internet addiction" model;

- organization of teaching and educational process using psycho-pedagogical forms and methods of this program;

- education of teachers and parents formatting information culture and organizing of teenagers' Internet addiction prevention.

The program includes the following principles:

- gradualness principle based on preventive methods, allowing teenager to build vital prospect, according to consciousness of one's opportunities and value orientations;

- principle of psychosocial methods unity, based on preventive and correctional tasks solution.

- security principle based on creation of conditions for successful socialization.

The program consists of three blocks: "I'm in Internet world", "Work with teachers and parents", "Diagnostic block".

"I'm in Internet world" block represents the complex of trainings, conversations, methodical recommendations submitted on correction of teenagers' Internet addiction, especially on decrease of Internet dependence incline.

"Work with teachers and parents" block contains methodical recommendations, parents meetings, lectures directed on prevention of teenagers' Internet addiction.

"Diagnostic block" contains techniques complex directed on correction of teenagers' Internet addiction taking into account "I-concept" specifics.

Thus, this program represents realization of consecutive stages equipped with a complex of psycho-pedagogical technologies, directed on solution of addictive behavior problem among teenagers in Internet.

Respectively we consider the following aspects of correction: educational environment promoting decrease of dependence influence on personal development of teenagers personal realization; focused program of teenagers' Internet addiction correction; purposeful work with parents directed on psycho-pedagogical education in the sphere of Internet technologies, increase of information literacy; complex education of teachers in the field of teenagers' Internet addiction prevention and information culture formation among them.

Correctional activity included two types of basic procedures: pedagogical support and psycho-pedagogical accompaniment.

After carrying out correctional work of changing of teenagers' Internet addiction level in

experimental and control groups control examination was conducted.

Results of Dembo-Rubenstein's technique of self-assessment and claims level:

According to results of research among studied groups significant distinctions in level of self-assessment and level of claims were distinguished.

In experimental group considerable changes are noted on control slice in comparison with primary diagnostics. In control group statistically significant distinctions weren't revealed.

Low level of self-assessment in experimental group has decreased to 10% and inherent only for 2 pupils (it was comparable with indicators of control group where the quantitative index remained at former level).

Average level of self-assessment in experimental group has increased at 60% and inherent for 12 respondents, in control group it remains at former level. High level of self-assessment in experimental group has increased for 5% and inherent for 5 respondents, in the control group it has decreased for 5% in comparison with the first slice. Overestimated level in experimental group has decreased at 25% and inherent only for 1 person, in control group 5% increase is observed.

Visually presented indicators of self-assessment level and level of claims in experimental and control groups at stating and control stages of a pilot study with use of Dembo-Rubenstein's technique can be seen in the chart of fig. 1:

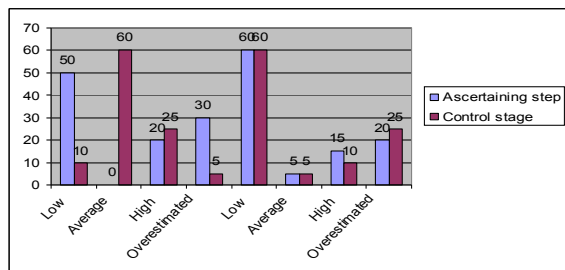


Fig. 1

Quantitative indices of claims level in these groups have significant distinctions. Thus low level of claims that was shown by 3 people (15%) of experimental group has decreased for 50%, in comparison with the first slice, and in control group it remains at former level. Average level of claims in experimental group has become inherent to 6 person (30%) that is 10% more comparing to the first slice, and in control group it was shown only by 2 people (10%) that is 5% more in comparison with the first slice. High level of claims at control slice has increased for 40% in comparison with the first slice,

and in control group it has become higher only for 5%. Overestimated level of claims in experimental group remains at the same level as at the first cut, and in control group has decreased for 10%.

On the basis of the received results we have made the chart of indicators of claims level in experimental and control groups on fig. 2:

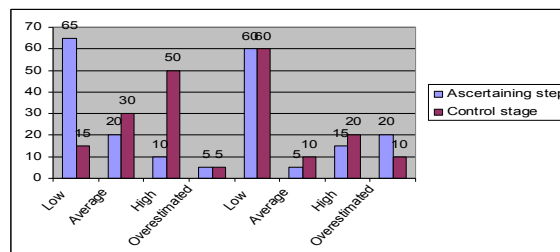


Fig. 2

In experimental group indicators of average level of inclination to Internet dependence have decreased for 60%, and in control group only for 5%. The lowest level of inclination to Internet addiction in experimental group was shown by 30% of respondents, in control group only by 5% though in comparison with the first slice this level wasn't revealed by any of respondent. Besides 12 people (60%) in experimental group at this stage showed "0 points" normal indicator though in comparison with the first slice this indicator wasn't shown by any of respondents.

According to these results at initial stage changes in experimental group can be explained by impact of correctional occupations.

On the basis of the received results we have made the chart of Internet dependence levels on fig. 3:

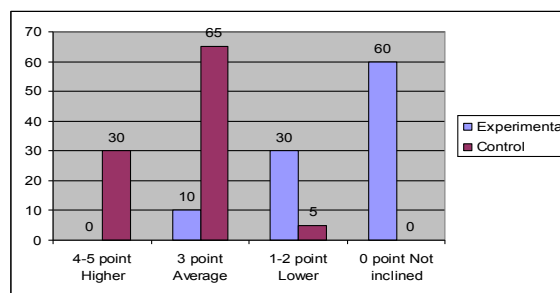


Fig. 3

To identify at this stage link between Internet addiction indicator and indicators of claims level, self-assessment level correlation analysis was carried out with use of Spirmen coefficient of rank correlation.

As a result of correlation analysis in experimental and control groups at control stage, as well as at stating stage distinctions in correlation links between these indicators were found out. The carried-out correlation analysis of obtained during diagnostics data allows to speak about existence of statistically reliable interrelations of self-assessment and claims level with Internet addiction level.

In experimental and control groups according to indicators of claims level of Dembo-Rubenstein's technique at control stage, as well as at stating stage significant correlation links with Internet addiction weren't revealed.

Correlation analysis has shown:

Analyzing correlation links between Internet addiction, self-assessment and claims level, it is possible to approve the following:

1. Control and experimental groups have distinctions in correlation links with Internet addiction, i.e. they aren't statistically identical in parameters studied in this research.

2. The results for indicators of Internet addiction level and self-assessment level received with the help of Dembo-Rubenstein's technique allow drawing a conclusion: low self-assessment is characteristic for Internet addicts (respondents of control group) and it is specific to addictive behavior in Internet environment.

3. For the respondents who aren't inclined to addictive behavior in Internet environment self-assessment (confidence and appearance) tends to increase its level.

Thus the analysis of research results at this stage allows to draw the conclusion that between teenagers' addictive behavior in Internet environment and self-assessment there is an interrelation that confirms a hypothesis of our research.

From all aforesaid it is possible to draw a conclusion: the correctional program in experimental group has helped to change dynamics of teenagers' personal development tendencies.

Discussion

Social consequences of communication and interpersonal relations mediated by Internet sooner or later lead to problems in family, bad progress at school, diet violation, development of various pathologies in organism etc.

The analysis has shown that Internet communication is attractive because of the following indicators:

1. In Internet many communication barriers lose their meaning: appearance and appeal, sex, age, social status.

2. Anonymity of communication in Internet gives to person self-presentation opportunities.

Respectively we have allocated five main types of Internet dependence:

- Persuasive web surfing (information overload) — infinite travel in World wide web, information search.

- Addiction to virtual communication and virtual acquaintances — large volumes of correspondence, continuous participation in chats, web forums, redundancy of acquaintances and friends in Network.

- Game dependence — persuasive passion for computer games in network.

- Persuasive financial requirement — playing games of chance in network, unnecessary purchases in online shops or continuous participations in Internet auctions.

- Addiction to watching movies in Internet.

So this analysis dictates need of preventive and correctional work for overcoming of teenagers' addictive behavior.

Conclusion.

This research possesses high potential of scientific novelty, theoretical and practical importance.

Scientific novelty and theoretical importance of the research:

1. Theoretical aspects of teenagers' addictive behavior in domestic and foreign psychology are revealed.

2. Factors of emergence and features of teenagers' addictive behavior are defined.

3. Psycho-pedagogical conditions of teenagers' Internet-addiction correction are revealed, namely:

– to use complex diagnostics of personal sphere and environment of teenagers' activity, allowing to establish reasons of Internet addiction emergence;

– to provide development and deployment of program of teenagers' Internet-addiction correction and prevention;

– to carry out organization of psychoeducation of teenagers, their parents, teachers for Internet-addiction prevention.

The practical importance of research is that we have developed and realized the program of teenagers' Internet-addiction prevention and correction and the data obtained during experiment confirm efficiency of its correctional influence on teenagers with addictive behavior in Internet environment.

The program efficiency is confirmed empirically that affords to apply it successfully in psycho-pedagogical process by teachers in system of

educational work with addictive teenagers, by psychologists in practical working of educational institutions and also in work with parents of pupils inclined to Internet dependence. Set of provisions and conclusions containing in this research, allows increasing productivity of teenagers' Internet-addiction correction and prevention.

Corresponding Author:

Dr. Fakhruddinova Rezida Akhatovna
Kazan Federal University, Institute of Philology and Intercultural Communication
Kremlyovskaya Street, 18, Kazan, 420008, Republic of Tatarstan, Russian Federation

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