LOOK	INTERNATIONAL JOURNAL OF ENVIRONMENTAL & SCIENCE EDUCATION
ACADEMIC PUBLISHERS	2016, VOL. 11, NO. 16, 8846-8857
OPEN ACCESS	

Psychological Aspects of Internet Addiction of Teenagers

Nataliya G. Tserkovnikova^a, Dina Ye. Shchipanova^a, Bella A. Uskova^a, Viktor V. Puzyrev^a and Olga A. Fedotovskih^a

^aRussian State Vocational Pedagogical University, Ekaterinburg, RUSSIA

ABSTRACT

The relevance of the problem under study is due to the lack of elaborated theoretical approaches to addiction and addictive behavior factors among children and adolescents, as well as due to the need and demand for psychological and pedagogical work with Internet addicted children and young people or with those who are potentially prone to Internet addiction, as well as with their parents. The purpose of the article is to study empirically the inclination to Internet addiction in the context of violated child-parent relationships (attitude of teenagers to their parents). The leading method of study is the psychodiagnostic method used to identify the specificities of the attitude of adolescents to their parents in the light of the inclination of adolescents to Internet addiction, the peculiarities of their motivation to use the Internet. The work presents the results of the research of the inclination to Internet addiction among teenagers, as well as the analysis of the factors leading to it. Special attention is paid to violations of child-parent relationships, acting as one of the factors determining Internet addiction in adolescence. The material of the article can be useful for psychologists and educators working in the education system. as well as for parents in the aspect of family upbringing.

KEYWORDS Internet addiction, adolescence, child-parent relationships ARTICLE HISTORY Received 14 February 2016 Revised 30 March 2016 Accepted 04 April 2016

Introduction

The emergence of the Internet at the turn of the 20th-21st centuries and its wide expansion has given the world not only positive aspects: quick access to information and the ease of finding it, new forms of communication, and other features, but also the appearance of such a phenomenon as "Internet addiction". The problem of Internet addiction is particularly acute among teenagers and young people because of insufficient personal and social maturity, non-critical attitude towards themselves and the world around them (Kasimova &

CORRESPONDENCE Nataliya G. Tserkovnikova Matalyts@e1.ru

© 2016 Tserkovnikova et al. Open Access terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/) apply. The license permits unrestricted use, distribution, and reproduction in any medium, on the condition that users give exact credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if they made any changes.

Biktagirova, 2016; Fahrutdinova & Solovyova, 2014; Golovanova & Sibgatullina, 2015; Boyarshinov & Asafova, 2011).

According to V.V. Shabalina (2004), all types of dependent behavior have common mechanisms of creating the need for the object of addiction, the formation of habituation to the object. The following features are common: the dynamics of the need by regular reiteration, the perception of deprivation of the object of addiction as a crisis, the problem of regaining control over the behavior, but there are differences, manifested at the level of motivation, factors, the degree of addiction to the objects, the extent of negative consequences for the student personally and for the people around him (Shabalina, 2004).

The destructive nature of addictive behavior consists in that the addictive method of implementation as a means is gradually becoming a target. And over time we can already talk about the changed lifestyle of the addicted personality. Addiction, in particular Internet addiction, is a way to escape from oneself, from the internal distress, inner poverty to the external illusion of harmony and happiness.

The typical features of Internet addiction in terms of A.E. Voiskunskiy (2000) are the inability and active unwillingness to be distracted from the Internet even for a short period of time; annoyance and irritation occurring at forced distractions; the desire to spend more time working in the Internet; the motive to spend more money on the provision of work in the Internet; the readiness to lie to friends and family, downplaying the duration of work in the Internet; the ability and tendency to forget about the domestic chores, education, important personal and business meetings when browsing the Internet (Voiskunskiy, 2000). Other symptoms of Internet addiction are an elated mood while working at the computer; gaining the sensation of elation and a kind of euphoria; difficulty in stopping the session; a large amount of time spent at the computer; neglect of family and friends; feelings of apathy and depression; emerging problems at school or at work; irritability, aggressiveness in real communication; anxiety, depression, unwillingness to accept criticism of such a lifestyle.

The likelihood of addiction is not determined by a single factor, it has a multi-factor mechanism. It is known that the predisposition to addiction can be predetermined by the particular qualities of the individual, a peculiar way to interact with other people and the world at large (Zhulina, 2016; Biktagirova & Kasimova, 2016; Narikbayeva, 2016; Khamatnurov, Dudina & Chistik, 2016). If we think about who and how forms these peculiarities of the personality, then we must look at the educational process and, above all, pay our attention to the sphere of child-parent relations. It is from parents that children learn about the important social experience accumulated during centuries. The family lays the foundation of the world-view, the system of guidelines and values, directives. The importance of this phase of socialization should not be underestimated.

As stated by O.I. Makhovskaya & F.O. Marchenko (2016) the positive family experience serves as a kind of information safety cushion. They note the compensatory role of educational media, which grows in compliance with the deficit of incentives of development in the family and the surrounding environment.

With the transition to the information society, the age of technology and intensive exchange of information the child-parent relationships also undergo changes (Yarkov & Lymar, 2012). As pointed out by A.V. Prokhorov (2013), today the values of family ties, the values of human relationships are really being destroyed. The institutional crisis of the family makes itself felt not only at the level of society, but also at the level of the family unit. Children, especially teenagers, respond to changes in the surrounding environment very quickly, so we need to take a fresh look at the relationships within the family, particularly the interaction of teenagers with parents, parenting styles and their possible effect on various forms of addiction among adolescents (Zhuravleva & Zavyalova, 2013; Khudyshkina et al., 2016). To understand the mechanisms of the development of Internet addiction among teenagers and the adequate respond of the organized psycho-pedagogical environment of educational institutions and, above all, of the family, we have carried out an empiric study of the correlation between the specificity of the attitude of adolescents to their parents and their Internet addiction.

Materials and Methods

Research methods

The following methods were used in the research: theoretical (analysis, synthesis, the hypothetico-deductive method, the descriptive method); diagnostic methods (questionnaires, testing); empirical (content analysis, psychopedagogical observation); methods of mathematical statistics and graphic presentation of the results (descriptive analysis, comparative and correlational analyses).

Experimental site of the research

The site for empirical research was secondary school № 81 of Ekaterinburg.

Stages of research

The research was conducted in three stages:

The first stage included the study of theoretical aspects of the phenomenon of Internet-addiction, the factors determining its formation among adolescents, and the features of teenager-parent relationships in the family.

At the second stage psychodiagnostic methods and techniques were selected to study the attitude of adolescents to their parents and the inclination of teenagers to Internet addiction; the empirical research data was collected.

At the third stage, the data obtained was processed using mathematical statistics methods, the results of the study underwent interpretation, the theoretical and empirical findings were specified, the achieved results were generalized and systematized.

Results

To examine the attitude of adolescents to their parents and the inclination of teenagers to Internet addiction the following psychodiagnostic methods were used: the technique of detecting the attitude towards the Internet "Incomplete sentences" by A.Ye. Zhichkina & Ye.A. Shchepilina (2012), processed with the method of content analysis; the psychodiagnostic method for the survey of Internet addiction - "Internet addiction scale" by A.Ye. Zhichkina (2004); the

questionnaire for studying the interactions of parents with children by I.M. Markovskaya (2007) - a version for teenagers.

87 adolescents took part in the research, 40 of them were girls and 47 - boys. The age of the research participants ranged from 14 to 16 years.

As a results of the applied methods all the research participants were divided into subgroups subject to gender and the level of Internet addiction. Then the results of the descriptive statistics were presented according to the technique scales for the selected subgroups, as well as the correlation analysis was conducted according to the scales of the applied techniques, dividing the sample by gender.

So when analyzing the results according to the scale of "Internet addiction" by A.Ye. Zhichkina (2004) there were no respondents with Internet addiction in the strict sense of the term. Just over half of the teenagers involved in the study have an inclination to Internet addiction. In the context of inclination to Internet addiction the research participants were distributed according to the the gender feature as follows: boys inclined to Internet addiction - 51%, correspondingly not inclined - 49%; girls inclined and not inclined to Internet addiction were divided exactly in half -50%.

The results of the descriptive statistics as to the technique "Parent-child interaction" by I.M. Markovskaya (2007) revealed that among adolescent girls inclined to Internet addiction there were unusually high indicators according to the scales: "Rejection-acceptance", "Inconsistency-consistency", "Satisfaction with the relationship of the child with the parent", and low indicators according to the scales: "Non-exactingness - exactingness", "Leniency -strictness", which may indicate inconsistencies in the parental behavior in relation to the teenager. The behavior of parents is perceived by girls as accepting and the teenager is satisfied with such attitudes in the family. There is also a low degree of exactingness to the teenager in families, and the leniency of the measures applied to the teenager.

When analyzing teenager-parent relations among boys inclined to Internet addiction, we see a low level of parental responsibility and exactingness, as well as the leniency of parents and the lack of strict rules and requirements. Teenagers are usually fairly self-contained, the control towards them on the part of the parents is insufficient, the emotional distance in relation to the parents is revealed. The actions of parents in such families are not consistent. At the same time teenagers are satisfied with the relationship between them and their parents. Parents for them have an intermediate level of authority, they acknowledge their rights and dignity, take into consideration their opinion.

Boys not inclined to Internet addiction have higher indicators on the scale "Control", unlike boys, predisposed to the development of Internet addiction. This can be explained by the increased exactingness on the part of parents as regards the behaviour of the adolescent.

The correlational analysis held with the Spearman correlation coefficient among adolescent girls revealed a significant positive correlation between "Rejection/acceptance of parental behaviour" and Internet addiction scale (rs = 0.469, p <= 0.05) and a significant positive correlation between the indicator on the scale "Inconsistency/ consistency of parents" and Internet addiction scale (rs = 0.478, p <= 0.05). We can reasonably state that the rejection of teenagers by parents, the lack of consistency in the upbringing can be the starting point for teenagers to search for other ways of acceptance and self-affirmation of their personality in a fascinating network of the Internet.

Among adolescent boys the analysis showed no correlation between the scales of methods detecting teenagers' attitude to their parents and the scale of Internet addiction. These results may be due to both the insufficient sampling and the peculiarities of formation of the mechanism of Internet addiction among adolescent boys. The inclination of adolescent boys to Internet addiction may be determined not by their attitude to their parents but by other factors such as the need for self-realization and autonomy, recognition and the maintenance of authority among the peers.

The results of the method "Incomplete sentences", processed by the method of content analysis are reflected in the reasons that motivate teens while using the Internet, when describing the perception of the network space, the time spent in it, as well as the perception of other people with whom they communicate in the Internet. In general, it can be noted that the motives for Internet use by adolescents (in decreasing order of importance) are communication, entertainment and education. However, from the point of view of the need for Internet use, the priority position is taken by education, leaving communication and entertainment behind. Teenagers consider in detail the category of communication which is the most important for them, highlighting the intricacies of communication not only in the positive way, but also marking out communication difficulties that are found in the Internet as well ("it is hard to agree with the opinion of others", "to write to another person", "it's hard to control myself", "it is hard to communicate with the outside world", etc.).

Describing the generalized results, it is possible to note the predominance of rather neutral attitude of teenagers to the Internet: "nothing has changed", "as usual", "habit". Moreover, the research participants evaluate rationally rather negative effects of the Internet: "it hinders me", "it is a waste of time", "it is addictive", "it is evil", "I become degraded", etc. Some answers to the questions of the method "Incomplete sentences" can be found in table 1 (figures indicate the number of responses related to the relevant categories).

Question № 1 "Three words meaning Internet to me"				
Entertainment	Communication	Search for	Negative	
		information	perception	
entertainment-10, games- 4, utube-1, recreation-4, free time-7, music-9,	communication-33, friends-4, contact-5, skype vk-19, twitter-4, instagram-3	information-33, search-2, articles-3, choice-1, help- 8, yandex-11,	killed time-7 virus-2, lies-1, lust-2, debauchery-2, scrapyard-3,	
films-8		browser-2, google-5, news-5, network-6, interest-4 learning-3, development-4, progress-2, self-	routine-1, evil-1, damaged vision-1, degradation-2, abyss-2, brothers (porn site)-1	

Table 1. Responses of teenagers to some questions of the method "Incomplete sentences" Question No 1 "Three words meaning Internet to me"

00	INTERNATIONAL JOURNAL OF ENVIRONMENTAL & SCIENCE EDUCATION

				oment-1,	
			spishy.r		
				inities-3,	
			wikiped		
	•		history-	1	
Question № 7 "After leav		twork I feel"		<u> </u>	
Positive emotions/condition	ons	Negative emoti	ons/	Neutral	
		conditions		emotions/co	
calmness-1,		wasted time-4,		don't feel ar	
satisfaction -4,		loneliness-5,	45	special, as u	
····· ,	eedom-	hungry-4, tired	ness-15,	that I'm not	in the
11,		sleepy-5,		Internet-3	
relief-10,		boredom-2,			
recreation-2,		sadness-1,			
differently-3,		trouble-2,			
depends on what I saw-1		understatemen			
		that I haven't c	ione my		
		homework-1			
Question No 40 4044 -	nonla in ti	a latarrat	to "	1	
Question № 10 "Other pe					iccollonoous
		acteristics of	Negativ charact		iscellaneous
· · · · · · · · · · · ·	eople				
_people interesting-9, tl	ne same-1,		of peop evil-5,		ke me-4
5	,		,		ke me-4
	ne same tyj ake -2,	Je -3,	boring-		
/ 1	ot like in li	fo 11		esting-3,	
2, n depends on a person-		16-11	3, obset	, addicts-	
4,			robots-		
people-3			strange	•	
Question № 2 "When I an	n in the Inf	ernet l "	Junge	2	
Entertainment	Commu		Search	for	Other
			informa		• • • • • •
laugh-2,	commu	nicate-28,		for info-4,	do house-
listen to music- 15, watch				ed in all-5,	work-2,
porn-3,	network			he news-2	busy-1,
sit in vk-11,		,			work-1
play-9,					
have a good time -3,					
zoned out-2, surprised-5,					
enter pikabu-4,					
do nothing-2,					
sit on different sites-21,					
isolated from all-3, free-					
4,					
it's me-2,					
calm-1					
calm-1 Question № 26 "I am in t					
calm-1 Question № 26 "I am in t I am as I am in real life	l ar	n a different per			
calm-1 Question № 26 "I am in t I am as I am in real life The same, like in life-70	l ar A d	n a different per ifferent	rson		
calm-1 Question № 26 "I am in t I am as I am in real life The same, like in life-70 similar-3	l ar A d per	n a different per ifferent son/different pe	rson		
calm-1 Question № 26 "I am in to I am as I am in real life The same, like in life-70 similar-3 Question № 27 "When I e	l ar A d per	n a different per ifferent son/different pe nternet I feel"	rson		
calm-1 Question № 26 "I am in t I am as I am in real life The same, like in life-70 similar-3	l ar A d per	n a different per ifferent son/different pe nternet I feel" Negative	rson	Neutral char	acteristics
calm-1 Question № 26 "I am in to I am as I am in real life The same, like in life-70 similar-3 Question № 27 "When I e Positive characteristics	l ar A d per	n a different per ifferent son/different pe nternet I feel" Negative characteristics	cople-14		acteristics
calm-1 Question № 26 "I am in to I am as I am in real life The same, like in life-70 similar-3 Question № 27 "When I e Positive characteristics a tsar-2,	l ar A d per	n a different per ifferent son/different pe iternet I feel" Negative characteristics compulsive gan	cople-14	normal-40,	acteristics
calm-1 Question № 26 "I am in to I am as I am in real life The same, like in life-70 similar-3 Question № 27 "When I e Positive characteristics	l ar A d per	n a different per ifferent son/different pe nternet I feel" Negative characteristics	cople-14		

needed-1,	not needed-3, lonely-	like a man-2,
confident-2,	6, disgusting -3	don't change-2
the best-2,		
comfortable-3,		
good-4,		
relaxed-16		
Question № 32 "In the Internet I	,,	
Positive characteristics	Negative	Neutral characteristics
	characteristics	
Have a rest-2,	a different person-3,	user-11,
communicate-18,	vegetable-2,	just me-21,
search for info-13,	waste time-4,	try not to abuse the time-
free-2,	degrade-5, liar-3,	2,
don't pretend-1,	enter porn sites-2,	as in life-10,
learnt much-4,	live-2	orient well-3,
found friends-3,		do a lot of things-2
a tsar-2,		
God-4,		
watch films-5,		
music-6		

Next, a comparative analysis was conducted of the most common responses of boys and adolescent girls, taking into account the propensity to Internet addiction. It revealed that the boys give more negative characteristics in response to questions on such scales as: "Positive characteristics of the Internet", "People in the Internet", "Information in the Internet" and "Me in the Internet". Teenage boys generally perceive the network space more negatively, and more often than girls use aggressive concepts in the answers to open-ended questions of the method "Incomplete sentences".

Wherein they evaluate their importance in the network highly using such responses as "I'm on the Internet - God", "I'm on the Internet - the tsar", "I'm on the Internet – a hero" but their companions or just casual acquaintances in the network are evaluated negatively - "stupid", "herd", "crazy", "inadequate" and so on. Such data may be indicative of inadequate self-esteem of adolescent boys inclined to the Internet addiction, and of the striving to compensate their insignificance with the help of the Internet.

Adolescent girls prone to Internet addiction more critically assess their addiction, focusing attention on the problem of loneliness, isolation from the world, danger. They evaluate their enthusiasm for the Internet as a "common thing", "waste of time", pointing out the difficulties of their abuse of a global network, on the fact that the Internet "hinders live communication." Adolescent girls who are not prone to Internet addiction, speak about other people on the Internet more positively, emphasizing the importance of communication, making new acquaintances. The negative characteristics of people on the internet say "degradation", "evil" and "addiction." In general, girls who are not prone to Internet addiction, provide more adequate responses and are critical with respect to others and to themselves. Thus, the results obtained during the empirical study indicate inconsistency and a lack of rigor, parental responsibility towards young people who are prone to Internet addiction, and rejection of teenagers on the part of parents.

Discussions and Conclusion

The obtained results are quite consistent with the above given theoretical positions by A.E. Voiskunskiy (2000), G.V. Soldatova (2013), V.V. Shabalina (2004) and others. And control and increased demands of parents in terms of the adolescents themselves allow teenage boys not to have the typical signs of Internet addiction.

Teens quite adequately assess their motives for the use of the Internet, speak critically about its negative impact, but at the same time, point out a lot of advantages in its existence, its use for good purposes (education and information search). The impression is that the teenager is not able to resist the information drawing him into its nets, including social ones. On the other hand the teenager on the Internet easily finds satisfaction of the need for a warm and friendly emotional communication, in this way living through misunderstanding on the part of parents, conflict interaction with them.

Rather, in the real world adolescents have problems in the process of communication with peers and adults, which may be the consequence of improper upbringing or a breach of the process of interaction between a parent and a teenager.

In adolescence, there is a change of the external position for the inner one, the transition to a qualitatively new social position, formation of a conscious attitude to oneself as a member of society. Consequently, on how social orientation goes on in this period much depends in the formation of social attitudes of an individual. It is in adolescence when such typical personal reactions as emancipation, grouping, imitation, protest and opposition are vividly expressed. Such reactions of a teenager are often displayed in the family. Relations between teenagers and parents in the family undoubtedly have an impact on the development of the adolescent's personality. Specificity of childparent relations, styles of communication and types of parental upbringing can affect the appearance of different kinds of addictions, including internet addiction of the children and adolescents.

Weakening of the role of the family in the upbringing of children and adolescents, or, in extreme cases, removal (or disengagement) of parents on education is characteristic of the current situation in Russia. A.A. Rean, Zh.K. Dandarova & V.A. Prokofieva (2002) use the term "social orphanage". Deprived of parents' care and attention, feeling emotional deprivation, these children and adolescents receive unlimited freedom. E.D. Hanzyan (2000) as a representative of the psychodynamic approach, emphasizes the coldness, alienation, traumatic, abusive or negligent behavior of the parents, a sense of one's own inadequacy. The significant role of adverse external environment conditions, the difficulties of relationships of adolescents with their parents in the formation of deviant behavior are also noted by G.N. Zhulina (2016). According to the research data of the Internet Development Fund and the EU project "Eurobarometer" Russian parents much less restrict their children on the Internet without much thought about the possible overwork and dangers (Measure of custody, 2010).

Misunderstanding on the part of parents, "cold" relationship with them or one of them, the loneliness of a teenager, inadequate parenting styles can serve as the impetus to search for the understanding and attention to one's own personality in social networks, new experiences and information. And, gradually getting involved in such activities as playing, socializing and learning, there appear, as a rule, positive emotions, lack of which in a course of time a teenager increasingly feels. As L.A. Zhuravleva & N.V. Zavyalova (2013) point out, social deviations in teenagers and young people environment are often caused by dissatisfaction with its basic needs - primarily the lack of communication, lack or absence of the possibilities of self-assertion and self-realization. G.F. Biktagirova & R.A. Valeeva (2014, 2016) emphasize the psychological and educational problems of the family, consisting in the lack of attention to children by their parents, the complexity of the psychological climate in the family. An important means of socialization is social networks on the Internet. "Hanging" in the networks is not only a compensation of the deficit of communication, a way of self-realization, an alternative to creativity, a channel of "letting off steam" (ability to satisfy gambling inclinations or release of the accumulated discontent), but also a form of social desadaptation, avoiding the problems and complexities of real life (Zhuravleva & Zavyalova, 2013).

Today, we are to face the following consequences of the wide spreading of the Internet and addiction in teenagers and youth environment: insufficient abilities to establish and maintain relationships, paucity of vocabulary, infantilism, suggestibility and imitation, egocentrism, appetite for risk and reckless actions, brightness of imagination, impressions and fantasies. Also an addictive personality has violated processes of interpersonal perception, such as empathy, reflection, identification. The processes of formation of the ability to put oneself in the other person's place, empathy become a problem with the addict as well.

However, from the point of view of G.V. Soldatova (2013), a child who does not use the Internet, worse socializes in the society. "Digital aborigenes" communicate differently, having the opportunity to talk a lot and often with people around the world, perhaps concealing their appearance; they are differently engaged in creative work, making websites, flash movies, creating whole worlds (home environment, clothing and weapons), they differently learn and socialize (Soldatova, 2013). American researchers G. Small & G. Vorgan (2008) note the increase in the rate of mental processes in young people actively using the Internet which promotes the development of new neural connections and makes a new generation smarter. Probably, it's still early to draw final conclusions about how our life will change due to the global informatization of the society and about the result of these changes. But we should not forget that there is not only safe use of the Internet, but also variants of Internet-dependent behavior (cybersexual addiction, computer games addiction, compulsive websurfing, addiction to virtual acquaintances, etc.). And adults (parents, psychologists, teachers), being able to prevent the development of such variants of behavior in children and adolescents and young people environments, should understand the mechanisms of the appearance of addictive behavior and in a timely manner carry out preventive and / or corrective work.

In our case, when among 87 teenagers not a single Internet-addict was revealed, we should rather pay attention to the preventive aspects of the work. Prevention should begin not in adolescence, but much earlier - at the senior preschool and junior school age. Preventive work is to be carried out in several areas: the family, the identity of the child or adolescent, pedagogically organized environment.

The formation of family resources to help the education of children and adolescents may become the objectives for the work of the psychologist with the family. It can be a parent's job over him/herself (awareness of inadequate styles of family upbringing for the harmonious development of the child and a subsequent positive change, awareness of the role of the Internet in their own lives and demonstration of the natural solution (without escape from reality into the world of the Internet) of possible conflict situations in the family); work with parent-child relationships (formation and development of the ability to listen and understand one's child, take care of it).

Work with a child and a teenager has to go in the context of the formation of his personal resources to ensure the development of an active lifestyle, the values of a healthy lifestyle, self-management and self-regulation skills. Involvement of a teenager in the processes not connected with computer activities allow to maintain mental and physical health not only of a teenager, but also of the members of his family. In recent studies the value of family education, the growing interest of children and adolescents in the family and family values are noted by G.F. Biktagirova and R.A. Valeeva (2016), which, of course, pleases. At the same time, the provision of information on safe internet in adolescents environment and the development of a conscious and often critical opinion by them help to prevent undesirable consequences in the form of internet addiction.

It was established that violations of child-parent relationships (for example, the attitude of teenagers to their parents) serve as a fertile ground for the formation and development of the inclination to Internet addiction of children and adolescents. The motives of Internet use by teenagers were revealed. In this regard, of particular importance to us are preventive measures aimed at the formation of family resources to ensure harmonious education of children and adolescents, as well as the development of needs in self-realization and autonomy, recognition and maintaining authority over peers in adolescents themselves.

The materials of this article may be useful for teachers, social workers and psychologists working in the educational sphere, as well as parents with the aim of understanding internet-addiction as a theoretical and practical construct and factors determining it.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Nataliya G. Tserkovnikova is associate Professor of Department of Psychology of Education and Professional Development of the Russian State Vocational Pedagogical University, Ekaterinburg, Russia.

Dina Ye. Shchipanova is associate Professor of Department of Psychology of Education and Professional Development, coordinator of research projects of the Institute of Psychological and Pedagogical Education of the Russian State Vocational Pedagogical University, Ekaterinburg, Russia.

Bella A. Uskova is associate professor of Chair of Germanic Philology, Russian State Vocational Pedagogical University, Ekaterinburg, Russia.

Viktor V. Puzyrev is associate professor of Chair of Germanic Philology, Russian

State Vocational Pedagogical University, Ekaterinburg, Russia.

Olga A. Fedotovskih is student of Russian State Vocational Pedagogical University, Ekaterinburg, Russia.

References

- Biktagirova, G. F. & Valeeva, R. A. (2016). Study of Family Values of Adolescents from Families with Many Children Formation. *IEJME-Mathematics Education*, 11(6), 1919-1926.
- Biktagirova, G.F. & Kasimova, R.S. (2016). Development of Emotional Sphere of Preschool Children. IEJME-Mathematics Education, 11(4), 799-807.
- Biktagirova, G.F. & Valeeva, R.A. (2014). Development of the teachers' pedagogical reflection. *Life Science Journal*, 11 (9 SPEC. ISSUE), 60-63.
- Boyarshinov, A.V. & Asafova, E.V. (2011). Stress responses of wheat leaves to dehydration: Participation of endogenous NO and effect of sodium nitroprusside. *Russian Journal of Plant Physiology*, 58 (6), 1034-1039.
- Fahrutdinova G.Z. & Solovyova E.G. (2014). Formation of the value-oriented polycultural personality of a future teacher in the contemporary education space. *Life Science Journal, 11 (SPEC. ISSUE 11-62),* 272-276.
- Golovanova, I.I., Sibgatullina, T.V. (2015) Designing the "Self—Concept of creative Self-Development" of Students during the training process in pedagogics. *Review of European* Studies, 7(5), 193-199.
- Hanzyan, E.D. (2000). Vulnerability of the self-regulation sphere of addictive patients: possible methods of treatment. Psychology and treatment of addictive behavior. In S. Dowling (Eds.). Moscow: Independent firm "Class", 29-33.
- Kasimova, R.S. & Biktagirova, G.F. (2016). Art Therapy as a Means of Overcoming Aggressiveness in Adolescents. *IEJME-Mathematics Education*, 11(4), 902-910.
- Khamatnurov, F.T., Dudina, M.M. & Chistik, O.F. (2016). Psychological and Pedagogical Problems of Development of Talent Among Schoolchildren. *IEJME-Mathematics Education*, 11(8), 2903-2913.
- Khudyshkina, T.V., Evtyugina, A.A., Suraeva, M.O. & Ilyukhina, L.A. (2016). Experience of Polyart Education of Children of Different Categories. *IEJME-Mathematics Education*, 11(8), 2858-2870.
- Makhovskaya O. I. & Marchenko F. O. (2016). Psychological amortization factors for media impact in development of children from different social groups. *The Education and science journal*, 3, 70-89. DOI:10.17853/1994-5639-2016-3-70-89
- Markovskaya, I. M. (2007). The psychology of children-parents relations. Chelyabinsk: Publishing house South Ural State University, 91 p.
- Measure of custody: results of a survey of parents in Russia and Europe on the theme of children's safety on the Internet. (2010). *Children in informational society, 3,* 44-47.
- Narikbayeva, L.M. (2016). The Self-Development of Non-Academic Intelligence Forms in a Future Pedagogue. *IEJME-Mathematics Education*, 11(8), 2985-2994.
- Prokhorov, A. V. (2013). The biggest gap usually occurs not between generations but between different families. *Children in informational society*, 14, 16-21.
- Rean, A. A., Dandarova, Zh. K. & Prokofieva, V. A. (2002). Social orphanage in modern Russia. Moscow: Fund for social innovations development, 94 p.
- Shabalina, V. V. (2004). Psychology of addictive behavior: on the example of the behavior associated with the use of drugs and other psychoactive substances. St. Petersburg: Publishing house of St. Petersburg Univ, 336 p.
- Small, G. & Vorgan, G. (2008). iBrain. Surviving the Technological Alteration of the Modern Mind. New York: Harpers Collins Publishers, 256 p.
- Soldatova, G.V. (2013). Are they different? Children in informational society, 14, 24-33.
- Voiskunskiy, A. E. (2000). The phenomenon of dependence on the Internet. Humanitarian Studies of the Internet. In A.E. Voiskunskiy (Eds.). Moscow: Mojaisk-Terra, 110-131.
- Yarkov, A.P. & Lymar, A.A. (2012). The Urgent Problems of the Youth Policy in the Modern Russian Society. The Education and science journal, 2, 115-128.

$\overline{\mathrm{OO}}$ International Journal of Environmental & Science Education

- Zhichkina, A.Ye. & Shchepilina, Ye.A. (2012). *The method "Incomplete sentences"*. Direct access: http://perviydoc.ru/v3543/методики_для_диагностики_интернет-зависимости.
- Zhichkina, A.Ye. (2004). The scale of Internet-addiction by Zhichkina A.Ye. Direct access: http://www.psyoffice.ru/3-0-praktikum-00295.htm
- Zhulina, G.N. (2016). Psychological and pedagogical support of professional self-determination of teenagers inclined to deviant behavior. The Education and science journal, 5, 83-96. DOI:10.17853/1994-5639-2016-5-83-96
- Zhuravleva, L.A. & Zavyalova, N.V. (2013). The Youth as the Innovative Social Community. *The Education and science journal*, 4, 77-90. DOI:10.17853/1994-5639-2013-4-77-90.