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ScienceDirect

Procedia - Social and Behavioral Sciences 141 (2014) 822 – 827

Procedia
Social and Behavioral Sciences

WCLTA 2013

Psychological Profile Of Children From Social Institutions Prone To Computer Dependency

Albina R. Drozdikova-Zaripova ^{a*}

Kazan (Volga region) federal university, Kazan, Russia, Kremlevskaya str. 18, 420008 Kazan, Russia

Abstract

The aim of the present research is to expose a psychological profile of children from children's homes and social orphanages prone to computer dependency. 302 teenagers at the age from 11 to 16 from children's homes and social orphanages of the Republic of Tatarstan, the Russian Federation, took part in the empirical research, 80 of them were identified by the selected methods as computer dependent and inclined to get into a risk group. Besides, there were recruited 30 educators, social workers and teachers of these institutions. There has been applied the complex of diagnostic techniques to diagnose the level of teenagers' computer dependency, to study their personal qualities and specific character of social intelligence, social and psychological adaptation, interpersonal relations, value-motivational, communicative and emotional spheres, self-assessment.

On the basis of the results obtained by the research there has been defined a psychological profile of inclined to computer dependency teenagers brought up in children's homes and social orphanages. Empirical research statistical data processing was carried out by means of standard methods of mathematical statistics (Student's t-criteria of differences, methods of correlation data analysis).

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Selection and peer-review under responsibility of the Organizing Committee of WCLTA 2013.

Keywords: Computer dependency, Internet addiction, game computer dependency, teenagers brought up in social institutions, personality qualities of teenagers inclined to computer dependency;

1. Introduction

Among nonchemical (behavioural) dependencies the computer addiction stands apart. On the one hand, it is not officially regarded as a disease; on the other hand, there are already clinics for its treatment. Besides, the terminology of computer dependency has not been established yet, specialists' attitude towards it is heterogeneous,

* Corresponding author: Albina R. Drozdikova-Zaripova Tel.: 89053118397
E-mail address: bina1976@rambler.ru

symptoms have been poorly studied, and as for the consequences, we will be able to see them only in some years when the present day generation of "computerized" children grows up.

The analysis of sociological and psychological researches on the subject matter of the research allowed drawing the conclusion that components of computer dependency are Internet addiction and game computer dependency (A.R. Drozdikova - Zaripova, R.A.Valeeva, A.R. Shakurova, 2012).

Great attention should be paid to those whose escape from the reality has not found its bright expression, who only start acquiring addiction patterns of behavior in difficult collisions with the environment, who can potentially be involved in different types of addiction realization. Many researches show that the most dangerous period for the Internet-addiction formation and game computer dependency is teenage age. Often, when teenagers plunge into the virtual world, they cannot resist it, as they have no necessary psychological defense mechanism. The computer dependency constitutes even greater danger to children of the "risk group" - foster children of social institutions. This category of children due to specific causes of their life is subject to negative impacts more than any other categories. The genetic predisposition to various kinds of dependencies plays its role here. These teenagers, as a rule, have already become addicts (toxicological addiction, alcoholism, nicotine dependency, etc.), that forms a good basis for faster acquisition and development of new forms of addictive behavior, in particular, Internet dependency and game-addiction. In turn, new forms of dependency can strengthen the increased tendency to alcoholization and narcotization of Internet - addicted teenagers, this fact has been confirmed by A.Yu. Egorov's (2004) researches.

Different aspects of Internet-addiction, dependencies on computer games have been investigated (V.A. Loskutova, A.E. Voykunsky, I.V. Chudova, A.E. Zhichkina, Yu.D. Babayeva, A.G. Shmelev, O.N. Arestova, L.N. Babanin, M.S. Ivanov, A.B. Khudyakov, E.A. Reprintzeva, I. Goldberg, D. Greenfield, R. Wood, M. Shotton, Sh. Tekl, M. Cole, K. Young, etc.). The modern scientific researchers are devoted to the study of teenagers' personal predispositions to game computer dependency and Internet- dependency.

Teenagers gaining computer and game dependency, have specific features of personal development, namely, inadequate, more often inflated self-concept, over motivation to risk and search for thrills, weak volitional potential, unbalanced development of the child's subjectivity parameters (A.V. Grishina, 2008); weak socialization, lack of self-confidence, reticence, low self-concept, hyper vulnerability, rigidity, anxiety, predisposition to the sense of guilt, craving for an escape from reality because of the younger teenager's dissatisfaction with parents' and contemporaries' relations (S.K. Ryzhenko, 2009).

It has been revealed in researches that individual and personal features of Internet-dependent teenagers are: feeling of isolation, low self-concept, predisposition to the escape of problems and responsibility, problems with communication, escape from real oneself into the virtual world (A.Yu. Egorov, etc., 2005); emotional instability, irritability, sensitivity to danger, low stress resistance, anxiety, helplessness, problems in communication, expressed absence of responsibility, hyper control of feelings, control of sexual impulses, and also difficulties of gender identity formation (V.L. Malygin, etc., 2011). According to T.S. Spirkina (2008), people, inclined to Internet-dependency, are characterized by emotional instability, low self-control, submissiveness to others, sensitivity, timidity, tenseness, introversion, anxiety, and also low level of spontaneity and aggression.

The represented data testify to a rather polymorphic structure of the Internet-addicted personality and those excessively indulged in computer games. The structure combines conflicting features demanding specification by means of different researches.

At the same time, in scientific literature there are no works devoted to the research of psychological features of teenagers - social institutions foster children, inclined to computer dependency.

The goal of this research is to reveal the psychological profile of teenagers - foster children from social orphanages, inclined to computer dependency.

2. Methods

Children from children's homes and social orphanages of the Republic of Tatarstan, the Russian Federation, took part in the research. At the first stage of the research 302 teenagers at the age from 11 to 16 (median/average/middle age – 13,5 years) were diagnosed, 80 of them were identified by the selected methods as computer dependent and inclined to get into a risk group. At the second stage of the work, personal features of teenagers – foster children of social institutions were studied on the selected sample. 30 educators, social workers and teachers of these

institutions also took part in the experiment.

Diagnosing of teenagers' computer dependency level was performed in accordance with the test "Computer dependency" and the questionnaire aimed to reveal computer dependency specific character. This questionnaire was developed by the author of the article and A.R. Shakurova (A.R. Drozdikova-Zaripova, R.A. Valeeva, A.R. Shakurova, 2012) in combination with the expert assessment of teachers-tutors according to the conventional criteria of Internet-dependency and game computer dependency presence (super-preoccupation by Internet or computer games, supplantation of other parts of social and private life, impossibility of subjective control over computer activity, decrease in progress level and presence of deadadaptation).

The test designated to reveal computer dependency consists of 48 questions. While answering the test questions, the respondents are offered to estimate the degree of their consent with the statement by choosing one of the following answers: "never", "seldom", "often", "very often", "always". Then answers are compared with the key and the level of computer dependency (low, average, high) is defined. The test includes three subscales (components): compensatory component or computer dependency as ataractic dependency; social component or placement of interests, life priorities into the virtual space; overvalued component or degree of preoccupation of the personal space by the computer.

The questionnaire revealing specifics of teenagers' computer dependency consists of 26 questions of opened and closed type. The offered questionnaire allows to obtain information about teenagers: age, gender, experience of computer use, timing at the computer, types of Internet resources and computer games which teenagers prefer, goals of the computer use, specifics of physiological and emotional conditions during the work at the computer.

Within the frames of this research the methods for studying teenagers' individual and psychological features were selected according to the criteria of teenagers' antiaddictive attitude and behavior formation: cognitive, value-motivational, emotional-volitional, attitudinal, active-reflexive (A.R. Drozdikova - Zaripova, R.A. Valeeva, A.R. Shakurova, 2012).

The following techniques were applied as the diagnostic material: G. Guilford and M. Sullivan's test of social intelligence, M. Rokeach's technique "Value orientations", A. Mehrabian's questionnaire about motivation affiliation (M.Sh. Magomed-Eminova's modification), R. Cattell's 16-factor personal questionnaire, Phillip's test of school anxiety, I.M. Yusupov's survey technique of empathic tendencies level, Rodger-Diamond's questionnaire about social-psychological adaptation, V. Shutts's questionnaire of interpersonal relations (QIR), technique of determination of communicative and organizing abilities of COA-2 (N.P. Fetiskin, V.V. Kozlov, G.M. Manuilov), Test "Abilities to Listen", Dembo - Rubenstein's self-assessment research technique.

In the research there were applied methods of mathematical statistics (Student t-test). According to the results of diagnostics, there has been created the matrix subjected to the correlation analysis by Spearman's method of grade correlation.

3. Results

According to the results of the computer dependency test, 80 teenagers - foster-children of social institutions out of 302 respondents were identified as computer dependent and inclined to get into a risk group of this dependency formation. These teenagers had overestimated compensatory component of computer dependency that promotes teenagers' compensation of disadvantage in actual life through searching for harmony, emotional stability and pleasure in the virtuality. The obtained results were confirmed by experts – teachers in the observation process of the studied children's behavior.

On the basis of the computer dependency formation indicators, obtained in the group of dependent teenagers, there was proved the absence of significant differences between boys and girls' results ($t_{Emp} = 1,5; p \leq 0,01$), between senior and younger teenagers ($t_{Emp} = 1,3; p \leq 0,01$).

The analysis of foster children's questionnaires showed that teenagers had poor understanding of their attitude to the computer, can hardly differentiate interests, preferences, and their sensations while operating the computer and free of it. For example, when teenagers are asked what they feel when they do not use the Internet or do not play computer games for a long time, many respondents did not give a definite answer. The answers were limited to the variants: "nothing", "I want to sit down at the computer", "I do not know". The questions requiring exact answers or

a choice of the answer from the offered ones caused fewer difficulties. The majority of teenagers – foster children of social institutions prefer to spend their free time on computer games (32,5%), for 17,5% of teenagers it does not matter what to do in their free time, 12,5% of teenagers like to watch TV in their free time, the same percentage like to communicate with friends, 11,3% - to read, 8,8% are inclined to follow the majority and they are engaged in the same activity as others. All teenagers participating in the research had computer work experience. Many began to use the computer actively after they entered social institutions as then, for the first time, they had a free access to the personal computer. The majority began to work on the computer at the age of 12-14 years (58,8%) and spent on average 2-3 hours at it every day (40%). 55% of respondents try to sit at the computer as long as it is possible. 15% of respondents complain about typical health problems for "habitual frequenters" of the virtual world: headaches, "sandpaper" in the eyes, ache in hands after a long stay at the computer. 70% of teenagers admit that, in general, they can do without computer games, but will hardly refuse to use the Internet. Along with this, 42,5% of teenagers under study prefer role-playing games, 36,3% - races. 83,8% of teenagers, inclined to computer dependency, prefer to spend time on social networks in the Internet.

According to social intelligence test data, it is possible to come to the conclusions that teenagers - foster children of social institutions, inclined to computer dependent behavior, badly understand the relation between behavior and its consequences (subtest No. 1: $\bar{x} = 2,5$; $M_0=2$); they are more oriented on verbal contents of messages, they are not always able to give nonverbal messages interpretation, especially in atypical situations (subtest No. 2: $\bar{x} = 2,7$; $M_0=2$) and as a result, they experience difficulties communicating with surrounding people face to face; respondents show some sensitivity to the character and shades of human relationship, but they can incorrectly interpret their interlocutor's words in connection with the context of the communicative situation, the repertoire of role behavior is poor (subtest No. 3: $\bar{x} = 3$; $M_0=3$); they are able to distinguish interpersonal situations, however, they rather often experience difficulties in forecasting the development of the situation, people's behavior (subtest No. 4: $\bar{x} = 3$; $M_0=3$). Therefore, the teenagers under study demonstrating computer dependency, can feel that they are awkward, clumsy, unappreciated and try to hide their true feelings, they close from everybody. Such people can get into conflict and even dangerous situations because they incorrectly imagine the results of both their and other people's actions. They have poor ideas about generally accepted norms and behavior rules.

The research of affiliation motivation revealed that according to the results of the motive "The intention to be accepted" the group of respondents showed a high level of development in most cases, and the low level of the development of the motive "Fear to be rejected". The similar combination of motives demonstrates that such people are actively looking for contacts and communication with people. At the same time, in the studied sample the low level of empathy ($\bar{x} = 33,1$; $M_0=28$) has been revealed. Teenagers, inclined to computer dependency, experience difficulties in establishing contacts with people, they feel uncomfortably in a big company. Emotional manifestations of surrounding people actions sometimes seem unclear to them. In its turn, people around them pay little attention to such teenagers due to their detachment manifestations.

The above stated confirms, to some extent, the results of teenagers' investigation according to COA-2 technique. It has been found that communicative and organizing inclinations of teenagers under study are poorly developed ($\bar{x} = 7,5$; $M_0=7$ - the level is lower than the average one). Therefore, they do not strive for productive communication, and they prefer to spend time alone, they experience difficulties in establishing new contacts with people and they are compelled to limit their contacts, they have poor skills to act in an unknown situation, they do not defend their opinion, they take offenses bitterly. They seldom take an initiative and avoid self-dependent decision making.

We suppose that the revealed communication difficulties of teenagers living in children's homes and social orphanages are caused by a peculiar closeness of a social space of institutions, limitation of social communications of foster children and absence of productive communication skills. The infelt need of teenagers in search of contacts and communication with different people, frustrated in the real world, is quite realized in the virtual world, first of all, on social networks.

According to the results of the research it was specified that teenagers-foster children of social institutions demonstrating computer dependency behavior, are undistinguished listeners who make many mistakes in communication, but often do not notice them ($\bar{x} = 17,6$; $M_0=18$ according to the listening comprehension test); they are badly socially adapted ($\bar{x} = 60,1$; $M_0=45$ according to Rogers-Diamond's questionnaire); strongly developed mistrust, negative experience of communication with contemporaries and adults make the perception of others more complicated ($\bar{x} = 19,9$; $M_0=21$ according to Rogers-Diamond's questionnaire); the self-acceptance occurs against

the background of "equalization" in children's group, differences of different tutors and other surrounding adults' attitudes to them ($\bar{x} = 20,9$; $M_0=17$ according to Rogers-Diamond's questionnaire), difficulties in the study, connected with fear of knowledge assessment and problems caused by the relations with teachers (results of Phillips test).

For such teenagers the compulsive behavior with frequent changes (the results of QIR questionnaire), manifestations of expressivity, self-sufficiency, anxiety, dependency on the group and straightforwardness (according to R. Cattell's questionnaire) are peculiar. The obtained data of Phillips's test testify that teenagers under study endure a social stress; first of all, in communication with contemporaries, they experience negative emotions in situations when they face the necessity of self-disclosure, self-presentation, demonstration of their abilities. They pay more attention to the way other people estimate their results, acts, and thoughts; they experience anxiety about it, and in most cases they expect negative assessment.

The significant values singled out by us (according to M. Rokeach's technique) for antiaddiction attitude and behavior formation were only partially presented among dominating values of teenagers of social institutions inclined to computer dependency (happy family life (35%), health (15%), interesting job (16,3%), strong will (15%), mannerliness (12,5%)). It has been revealed that such quality as sensitiveness is among the least preferred qualities; thereby it has confirmed the results of social intelligence test.

The computer-dependent teenagers - foster children of social institutions adequately estimate themselves according to such qualities as "Abilities" (53,4) and "Health" (64,7), but underestimate according to such ones as "Character" (43,9), "Appearance" (44,3), "Intelligence" (44,5) and "Self-confidence" (44,6). At the same time the level of aspiration on these scales is rather high that testifies to the low level of teenagers' optimism. In general, it is possible to speak about teenagers' dissatisfaction with themselves, high degree of criticism towards themselves at the relatively steady but low emotional background of mood.

In order to determine what personality features Internet and computer games users have to get into the computer dependency risk group, the correlation analysis between the data of the computer dependency test and the results of techniques revealing teenagers' personality characteristics – foster children of social institutions has been carried out.

As a result of statistical data processing, significant and highly significant correlations between studied parameters ($p \leq 0,05$ and $p \leq 0,01$) were obtained. It was found that the higher the level of computer dependency ($r=0,44$), the more personal space is taken up by the computer ($r=0,563$), the greater the compensation of disadvantage through the contact with virtuality ($r=0,46$), the more expressive are teenagers' subjective sensations of emotional comfort. It is a very dangerous position as the sense of security in the virtuality is ephemeral, deceptive; it decreases the motivation of dependency rescue. It was revealed that the lower the social intelligence, the higher the level of computer dependency ($r=-0,599$), and also the higher the value of the social component of dependency, the stronger the decrease in the ability to listen ($r=-0,453$), empathic tendencies ($r=-0,533$), physiological resistance to stresses (to $r=-0,442$). Great preoccupation of the personal space by computer that is shown by the over valuable component, certainly, disturbs the development of direct social contacts and impacts the process of study. It was found, that the stronger the compensatory ($r=-0,444$) and social components ($r=-0,442$) of computer dependency, the lower the frustration in the achievement of success. The recognition gained in the virtuality, in this case, takes the supporting, compensating "social hunger" status. However, this recognition exists only in the virtuality, it does not improve the social situation in the real world, and therefore such support is temporarily. It is shown that the stronger the preoccupation of personal space by the computer, the lower teenagers' abilities to comprehend the connections between behavior and its consequences ($r=-0,428$).

4. Conclusions

On the basis of the research results of children brought up in children's homes and social orphanages there was developed a psychological profile of a computer dependent child studied there: low social adaptability; immaturity value sets; compulsive behaviour exposed to frequent changes; display of expressiveness, self-sufficiency, anxiety, dependency on the group; miscommunication; survival of social stress, connected with communication with contemporaries and teachers; negative emotional suffering of situations associated with the necessity for self-

disclosure, demonstration of their possibilities; self-dissatisfaction, weak comprehension of relations between behavior and its consequences; difficulties in interpretation of nonverbal messages; ability to identify interpersonal situations and at the same time difficulties in situation development and people's behavior forecast; intention to be accepted by surrounding people; readiness to look for contacts and possibilities of communication with people is accompanied by frequent difficulties in contacts establishment; low empathy; inability to listen to others; poor orientation in an unknown situation; preference to avoid self-dependent decisions and initiatives in public activity; bitter feelings of the offense; low level of optimism; high degree of self-criticism at the relatively emotional steady but lowed background of mood.

For orphaned teens the computer being the conductor into the virtual world, can become the source of compensation satisfying specific needs of the orphan, including the need in social contacts, without disappointment and danger to be rejected (A.R. Drozdikova - Zaripova, A.R. Shakurova, 2012).

The long-term complex system of prophylaxis and correction aimed at the education of the child's personality is necessary for the development of mechanisms to supplant computer dependency from value consciousness of teenagers - foster children of social institutions. The obtained interconnections between specific personal characteristics of teenagers may be taken into account for the development of prophylactic and correctional programs aimed at computer dependency decrease.

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