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THE INFLUENCE OF THE COMPUTER GAME'S VIRTUAL REALITYUPON THE HUMAN PSYCOLOGY

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Abstract: The influence of computer technologies upon the psyche of a person is depicted; 3D computer games as implementers of subconscious (including aggressive) desires of a person in particular and possible variant of psycho-correctional work with the usage of computer virtual reality.

Keywords: computer virtual reality, game addiction, subconscious, person's needs, self-estimation, aggression, mechanisms of psychological defense.

ACM Classification Keywords: K.4.2 Computers and Society - Social Issues

Introduction

In translation from Latin "virtual" ("virtualis") means being in latency, but having an opportunity to become apparent, to happen. Projecting the subjective emotional states into the world of virtual realities through the interaction with the computer, a person often appears in captivity of the opportunity to change own mood artificially.

The dependence on the computer and computer games in particular has become one of the serious social and medical problems during recent years. The pathological addiction to the game is registered in all age groups of population and turns more and more into a kind of gambling epidemics. Increasing occurrence of pathological addiction to the game led a lot of people to the poverty and some of them to the suicide. Urgency of the problem of pathological addiction to the game is viewed in connection with three main reasons: 1) social and financial problems which pathological gamers have - 23% of gamers have financial problems, 35% of them are divorced, 80% have bad personal relationships in marriage; 2) existing of unlawful acts – nearly 60% of addicted gamers commit crimes; 3) high risk of suicides – from 13 till 40% among pathological gamers try to commit suicide, 32-70% have suicide thoughts.

This problem exists and demands researching. The present article does not claim to complete scientific explanation of the questions defined by this theme or to substantiation of theory. Its aim is to depict the trends of research and propose some corrections into existing today scientific concepts about interaction between a human being and a computer in the course of contact. We shall try to analyze some aspects of the influence of the computer virtual reality upon the human psychology and the reasons of deep, unconscious development of person's psychological addiction to the computer games.

The Psychology of Game Mania: Modern Status of Problem

The first computer game is considered to be "Tennis for two" invented in 1958 by American scientist William Higinbotham. Today we have several directions into which computer games have developed: game automatic machines, television-game devices and computer games themselves. In 80-90s a lot of researches were conducted in Western psychology devoted to the possible influence of the videogames upon a child. The first psychological research of the addiction to the computer was held by M. Shotton. At the end of 1994 Kimberly Yang worked out and placed on a web-site a special questionnaire. She obtained nearly 500 answers among which 400 were sent by addicted people according to selected by her criteria. In 1995 Goldberg proposed a set of diagnostic criteria for defining the addiction to the Internet, based upon the features of pathological addiction to

gambling. In 1997-1998 the research and consulting psychotherapeutic web-services devoted to this problem were developed. In 1998-1999 K. Yang, D. Grinfild and K. Surrat published the first monographs. To the end of 1998 according to Surrat Internet addiction appeared to be legalized – not as a clinical trend in narrow sense, but as the sphere of researches and sphere of giving people practical psychological help. In the CIS countries the Internet addiction was viewed by psychologists and psychiatrists: A.E. Vojskunskii, M. Ivanov, Yu.V. Fomicheva, A.G. Shmelyov, I.V. Burmistrov, T.N. Dudko.

Modern researchers divide all psychological reasons of development of addiction into two categories:

The first category is the influence of environment (i.e. outer factors): the development of technical progress (including computer technologies); the manifestation of social anomia in modern society, i.e. traditional values do not exist any more and new system of norms and values does not formed yet (Merton, Darendorf, Curek and others); the formation by youth groups own subcultures which sometimes have disintegrated character; destroying of social institutions including families; hypo- and hyperguardianship of the child by parents.

The second category is connected with the peculiarities of the structure of the personality of the addicted person. A great impact into the studying of this problem was made by psychoanalytical researches. The main attention they pay to the subconscious and its influence upon the personality, to its role in the formation of addicted behaviour. Psychoanalytics do not make great differences between chemical (alcoholism, drag addiction and others) and emotional (work addiction, sex addiction, anorexia, computer game addiction and others) addictions. They suppose their inner mechanisms to be the same.

From the point of view of modern psychoanalysis addiction is the delitescence of suicide, i.e. the attempt to commit suicide which is prolong in time. Psychoactive object is used as the mean of self-destruction. The suicide itself is the attempt of going away from the disease, psychosis or the intention of overcoming the inner antagonism. Another aspect being paid attention to by psychoanalitics is identity. The difficulties in own identity's formation, its disturbance can become the additional risk factors in formation of addiction.

There is no common view concerning the mechanisms and reasons of addiction's formation among psycoanalitical researches but they are quite alike.

In domestic psychology the attitude to the entertaining games was quite scornful till the last time: "… in a whole gambling games are harmful as they lead to thoughtless squandering of time" (V.V. Rubtsov. A Learner before the computer: what is allowed or not // The Basics of Social-genetic psychology. – M., Voronezh, 1996). But in the process of development of innovational technologies in modern society a lot of specific problems have been accumulated: starting from the tendencies of current moment and the appearance of blending of game and movie till the opportunities of using computer programs in the sphere of education and problems of negative influence of computer technologies upon the consciousness of person. In connection with this the researchers pay attention to this sphere again. They analyze in details the opportunities and demands to the creation of developing teaching programs, the ways of organizing the work of a child and an adult in situation of using computers, the functions of the computer in learning activity. At the same time entertaining computer games, including plot games installed on personal computers and television-game devices are viewed superficially in the majority of cases. Though they gain increasing popularity and obtain one of the first places in the frequency of usage as personal entertainment. More than that, they become the first form of interaction with the computer available to a child.

It is difficult to overestimate the importance of deeper investigations of this problem because in spite of widely studied influence of computer games upon social adaptation in western researches the contradictory data about the connection between self estimation, social skills, successfulness of people and the time they spend playing computer games were obtained. On the one hand, the game is a supporting environment in which one can gain results and strengthen oneself but, on the other hand, the addiction to the computer intensifies the problems in the sphere of social contacts isolating the person, giving it the opportunity to go away from the problem. At the

same time the games themselves become the reason for communication, the topic of discussions and rivalry in obtaining the game's results, i.e. they can serve as a mean of socialization.

In domestic psychology the level of development of this problem is not high enough. Especially little attention is paid, to our mind, to the influence of the interaction of a person with the computer upon deep, subconscious sides of human psychology.

The Mechanism of Formation of Addiction to the Role Computer Games

Succeeding to psychoanalytics, we consider as well that under the influence of negative social conditions the person seeks the ways to release the inner tension formed as a result of inappropriate parental upbringing (emotional rejection; hypoguardianship, hypoprotection, hyperguardianship, contradictory upbringing in the family). Additionally the passion to the computer games forms within a player the needs which do not contribute to the person's adaptation to the environment, to the society in which he/she lives. That is, a vicious circle arises and only the person motivated to self changes can ruin it under the influence of awareness of subconscious (hidden deep in the mentality) motives of own behaviour.

In connection with this we held the investigation of three groups of people having the easy access to the computer games. The respondents were proposed a set of questions giving an opportunity to find out the level of their involvement in playing activity and the test for studying the level of self estimation with the aim of learning the connection between the affection to games and self estimation. The inquiry was held among first-year students (230 participants) of Kirovograd state pedagogical university (Group I). It was held in two steps: in April and in November of 2009. Additionally 14 people who are engaged into the development of new programs (programmers) were questioned. Besides, the author of the article as a psychological practitioner consulted 12 persons at the age from 15 till 20 years, who can be classified (under the criteria of Yu.V. Popov and V.D. Vid) as people with developing computer addiction (Group III).

It was found out that in case of having inadequate self estimation the student (116 persons) preferred not aggressive logical games playing sometimes aggressive games as well (we may assume that the students consciously kept back the opportunity of their affection to aggressive computer games, but judging from the communication with them, the given answers in a whole were true). 18 persons with low estimation and 10 persons with high estimation preferred to play aggressive games more. Practically all students with adequate self estimation preferred to play aggressive games. They mentioned, besides, that they play mostly for the sake of entertaining but after the game the spirits became higher. We may assume that in this situation the game helps either to form adequate self estimation or to keep it in stable state if self estimation was formed before the acquaintance with the games. But on the other hand, we cannot say more precisely what the reason is and what the result of this situation is. For more objective evaluation of obtained data one must hold additional investigations taking into account the factor of time.

Also nearly all students pointed out that other people who played aggressive games could be irritated either before the game or during it or after it, but nobody acknowledged the presence of aggression in themselves in such situation (in reality often while answering this question the person's mechanism of psychological defense snap in action, which was found out during personal conversation with respondents: they felt aggression). While holding inquiry no game addicted person was found.

The fact of non-existence of game addicted persons among this category of respondents we consider to be natural. One of the questions showed that all students who are playing computer games now started playing them being young or middle teenagers. It means that the personality had enough time to have the formed enough motivation for entering the university before finishing school. The game addiction presupposes the many hours abstractedness from other types of action. The students' motivation presupposes spending a lot of time for

studying. They play games to fill in the time, for the sake of pleasure from the game itself, for the result, for the satisfaction of the motive of achievement, possible rivalry with other players and so on. In this case the game is combined with other types of activity. A person communicates normally with other people and uses computer game during the leisure time.

To pay attention to the second group of respondents and having summarized the personal impressions and the answers of 14 people we came to such general conclusions: the constant desire to use computer is presented, but we cannot call it an addiction yet. This group of people under consideration as well has other interests not connected with virtual reality, though during their playing computer games the partial change in reality's perceiving already happens. There is narrowing of consciousness with great concentration on the giving task, inner personal insularity on the system: everything concerning this loses the interest. The feeling of heat during the finding way out in decision difficult computer task is characteristic for such people. While creating own perfectly functioning program the person feels satisfaction, the feeling of self-importance appears. At first narcissism appears and it brings more satisfaction than the presence of witnesses during the triumph. And only then, in some time, the desire to show own work to others appears. And even if the tiredness comes, the eyes hurt; the inner dependence of the desire to work with the computer, to seek for something new still remains. These people are characterized also by the passion to the computer games, but only for pleasure, for having rest.

While analyzing answers of this group of respondents we found out that it was possible to divide them into two subgroups. For the people of the first subgroup computer games help to decrease the level of aggressiveness hidden in deeps of unconsciousness; with the people of the second subgroup a definite social barrier which blocks the asocial behaviour is destroyed. It is difficult to say what factors influence the appearance of such reactions. To do this we need additional aimed researches.

Besides the respondents remarked that after the game finished the emotions appeared during the game (including aggression) remained with them in real world from five minutes till two hours.

People playing computer games regularly every day for several hours were referred to the third group. The psychological corrective work was conducted with them. It was found out that in most cases these are people with pronounced non-adequate self estimation, with distinctive restraint which hided inner spite and the desire to isolate oneself from outer world. It is the result of non-forming and inefficiency of ways of person's psychological defense which could give him an opportunity to reduce the emotional tense even for some time; of the person's inability to overcome productively the situation of complicated satisfaction of actual, vitally important needs; of the deformity of the system of values; of the inclination to react inadequately to the frustrating circumstances; of the existence of psycho-traumatic situation the way out of which cannot be find; inability to perceive the situations connected with the necessity to overcome the life difficulties adequately, with the building the relations with the people around and regulation of own behaviour. Thus the personality appears to be helpless before the negative states overwhelming it and it resorts to changing of its state with the help of virtual reality. Very often it helps hesitated and timid person to release from the fear and uncertainty. But on the other hand in the process of developing game addiction the psychological state of many people starts changing: the inner conflicts intensify; the week psychological adaptation becomes more and more vivid; the release of adequate perception of emotions through mimicry, gestures and poses of another person is noticed including expression of own once; the increased level of emotional expression is registered; the leveling of sex differentiations in emotional sphere between boys and girls appears.

Besides, in Group III of respondents in 10 cases out of 14 the unconscious suicide thoughts were registered. It is necessary to notice that two persons refused from psychological corrective work in spite of parents' demands to continue the communication with the psychologist (young men of 23 and 24 years old).

The changes of the needs' character under the condition of game addiction

We as many other researchers witnessed the changes of needs of people having game addiction.

Taking into account the classical pyramid (hierarchy) of needs by A. Masloy, we should notice that the needs under the situation of game addiction have a bit different character according to the point of view of specialists. Below we present a table of needs on non-playing people (non gamers) and gamers

Non gamers	Gamers
Need in self actualization	
Usage of own potential opportunities for personal growth, self development, career and professional growth, implementation of own wishes and fantasies in reality.	The satisfaction of this need adds up to achieving new records in computer games, obtaining sharper feeling with the help of game, realization of own fantasies and desires with the help of computer games.
Aesthetic needs	
Acceptance of rules and norms of the society, acting according to aesthetic norms.	There is no prohibitions and limitations accepted in society in computer games, that is why gamer feels freely and comfortably in virtual reality (code of ethic norms is defined by the game itself) having an opportunity to perform any deeds with impunity (pogroms, explosions, killing of "aliens") and to the contrary feels disgust for real world probably understanding own defectiveness.
Cognitive needs	
Everything mysterious, unknown, unexplained attracts, as the result the desire to receive knowledge and skills for becoming acquainted with it appears.	The desire to know something new refers only towards new cool computer games. Anything outside the virtual reality interests not much or does not interest at all.
Need to be respected	
The intention to achieve respect of people, to rise own prestige in society, to receive professional and personal recognition, not to spoil own reputation by any deed.	The intention to rise own prestige in the circle of gamers, the desire to become the best player, to become a leader among them, a "legend of gamers' circle".
Need in affiliation and love	
A person needs the emotional relations with people, in taking its own place in its group, comes to this goal intensively.	A person tries to avoid extra social contacts, preserving them only in the circle of gamers. Love is understood through the prism of virtual reality in which he/she is a "superhero", all-powerful wizard, unconquerable warrior etc.
Need in security	
A person seeks for the order and stability in real vital situations. Facing the threat he/she tries to avoid it or to obviate it.	A person is not confident in himself concerning real world which is perceived as strange, full of traps and unexpectedness, that is why he/she tries to stay longer in virtual reality in which he/she feels self-confidently and quietly.
Physiological (organic) needs	
The satisfaction of these needs in natural, normal way.	Often non adequate replace of such need as sexual satisfaction by virtual sex, games sex – modulators. Being involved into the game a person often does not feel hungry or thirsty.

Main mechanisms of developing game addiction are based upon the needs of a person in taking the role and going away from reality. A person who adapts normally in society does not try to avoid from reality. Only nonadapted people who estimate themselves non-adequately go away from reality taking other role on them. A feeling of being not protected is a sign of increased anxiety the level of which increases together with the increasing of contradictions between reality and virtual reality in the consciousness of game addicted person. On

the one hand the adaptation to the virtual world rises, but on the other hand the nonadaptation to real world increases. The intention to go into virtual world becomes a mean of satisfaction of a need in security and serves as a kind of protection from reality. In connection with this the changes in physiological and social needs of a person take place. Very often the game addicted person tries to "hide" with the help of the mechanism of psychological defense as far as possible the real, hidden and located in subconsciousness needs which are in conflict with ones adopted by the society. In such cases the following mechanisms function:

- exclusion – not the facts of game addiction are replaced from the consciousness but the psychologically traumatic circumstances coming with the rupture from the society. Such circumstances can be the following: impracticality of the known gamers towards the circumstances of living, accusation of them in theft of money from family members with the aim to continue the game, the refusal to communicate with surrounding people and so on.
- rationalization – the defensive mechanism with the help of which a person tries to find acceptable explanation to own extra affection to games, i.e. he/she rationalizes pathological, not realized enough addicted behaviour. The following rational explanations are the most popular: for calming oneself; my friends play; I do not drink alcohol, do not take drugs; it is easier to communicate their and so on.
- projection – a person becomes free from the feeling of fear and guilt arrogating own negative features to other people. The demonstration of rational projection is registered within the young people. The game addicted person knows that by means of game he/she shields oneself from those around one, knows that it creates the problems in communication with other people, but he/she arrogates the misunderstanding of his inner state, ungrounded petty objections, hard-heartedness, aggressiveness and other negative emotions concerning him to other people. All the more "everybody plays different games now and nothing awful happens".

Concerning the fact of lowering the level of aggressiveness during the game we may suppose, that it happens dew to the mechanism of projection and transfer which helps to satisfy subconscious desire to punish offenders. To understand their influence properly we need study the process of development of game addiction within the person

The Mechanism of Forming the Psychological Addiction to Role Computer Games

To come back to the early childhood one may notice that at this age the child lacks words for expressing his inner state. And he learns to use his emotions and at the same time he studies the ways of manifestation of emotions by other people. This ability of studying emotional sphere of a person is given to a child by nature as an integral part of psychological development in early age. But not always this studying happens as positive moment. Being practically helpless a child is made an endless row of unconditional and uncompromising demands. On the one hand there is an absolute necessity (fixed genetically) to evacuate bowels when a child wants, to destroy, to express feelings and pleasant emotions connected with movements and discoveries. On the other hand there are firm demands from the people around and parents first of all for a child to refuse from these primary pleasures in order to receive the parents' approval as a reward. This reward which can disappear as quickly as it appeared is the inconceivable mystery for a child who has not learnt yet the connection between the reason and the result.

Displeased glance addressed to him can course the feelings increasing the negative data about him. The more a child receives negative information from outer world the more the uneasiness in relations with world around grows. He himself cultivates the feeling of own inferiority and as a result of it the displeased by himself appears. But revealing own displease through emotions a child risks to be punished by people around in case of this displease is not accepted by them. Coming out of the fact that every person subconsciously aims at self-defense, at adjusting to survive in different conditions (because of this in early age a child seeks first of all after receiving

parents' acknowledgment as communication with them often is the condition which guarantees such survival). Depending upon the type of relationships which are established between a child and its parents every child finds own way to attract the parents' attention or in other words creates own system of communication with surrounding. It happens quite spontaneously: a child does not know yet what is good and what is bad. Depending on his actions, results and situation definite reaction of those surrounding appears. Parents and other adults often give their evaluation to what is happening in which connection in most cases a child perceives this evaluation as the evaluation of him not of his action. That is why if some actions do not produce expected parents' reaction and do not attract their attention, but to others parents react, so a child has fixed intention to do those actions which produce the parents' reaction. Thus the formed stereotype of own relationships under the influence of communication with parents and own manner of communication become fixed.

Besides, children are very inclined to the investigation of adults' behaviour. Boryshevskiy M.I. explains it by the fact that the ability to analyze critically the adults' behaviour is not developed well enough in small children yet. Noncriticality of a child is especially vividly displayed towards the parents who are for him an irrefutable authority. He loves them and relies on them. That is why negative emotions and feelings which appear in him raise fear as they can result into the rejection of a child by his parents or by other adults who seem to be all-powerful to him at this stage of development. He/she starts pretending that there are no negative emotions in him. But as they do not disappear a child starts to project them outside, i.e. the surrounding world seems to be more cruel and awful to him than it is in reality. A child starts to feel better on the one hand but on the other it becomes worth as now he feels himself be in alien surrounding. At these stages the world is still equal for a child to his mother and father. And now instead of trying to tear those to pieces in his mind because of hunger and fury being punished by them a child starts to project these feelings on his parents; adults are imagined by a child as cruel and awful. In compliance with this, surrounding world seems to be alien and cruel as well. And all other people are included into this world. As the initial perception usually assigns to subconsciousness then he will unconsciously perceive all other people as persons who relate to him aggressively, i.e. the aggressive attitude towards them is formed inside of him (attitude to outer world which later conceals by later development referring to up-brining). Coming out of this some outer threat always exist subconsciously for a child who is ready for defense every minute. Naturally it would be better to destroy the "alien" world but as it is impossible in reality or there is no object on which such situation can be played or such an object resists to such transferal so this is transferred into the virtual world.

It means that if the scheme of the computer game coincides with the scheme of the situation which is important and uncomfortable for the gamer's "I", it gives him pleasure to play this game. At the same time quick victory brings the feeling of dissatisfaction and pressing emptiness. That is why the gamer sometimes creates by himself barriers on the way to victory. After several difficult losses the victory is very significant. The images of those with whom the gamer constantly or accidentally comes into definite relations are also included into the game's scheme and these relationships develop according to the scheme proposed by the player. And as it known usually it is the scenario, the scheme of important for player relationships. That is, a kind of psychotherapy takes place which leads to the decrease of inner tension. But if the frustration is high enough then the aggressiveness shown during the game continues to be present for time from 45 minutes till two (and more) hours and may develop in the relationships with those people around.

At the same time the most difficult thing is to take the first step. That is why if the intention to destructive actions presents within the person subconsciously (for example, to beat certain person) but it cannot be realized under existing circumstances (it can be very close person or a person who will not allow to do it) so designing similar situation a person takes the first step to some extent: destructive behaviour in virtual world. With the help of such actions the control over subconscious desires within such person is reduced. When the first step is taken and a

person obtains definite moral satisfaction out of done, a kind of psychological relaxation takes place. But this relaxation is temporary and unstable as the source of tension exists in reality. If a person is inclined to satisfaction of desires and the defensive mechanisms restraining it within generally accepted behaviour are week enough, the dream may come true. More than that during the game subconscious tension of muscles and accumulation of potential energy take place which demands the release. So to avoid the uncontrolled reaction one must create the conditions under which this release would take place under the control of conscious, otherwise a great possibility of development of conflict situations exists.

Why is such relaxation possible in this situation? As it is known in the person's brain there are many different centers responsible for this or that functions leading to the satisfaction of our demands and desires. When one of them is stimulated by non-realized definite demand or desire a person feels discomfort. When combined unsatisfied desires influence upon a person, he/she feels suffering, i.e. corresponding brain centers will be in the state of stimulation for a long time providing orientation of person's behaviour to the achieving of goal. The stronger such stimulation is the greater effort the person takes to realize his orientation.

The intensive searches of means of releasing this tension start. The means socially excepted together with asocial ones can be included here. During last time computer has started to be included here more often. It helps to release tension within definite type of a person. During this the "brain center" of interaction with the computer is forming. If you work on it, the center of stimulation inhibits and the satisfaction comes. Thus, a person fulfills the "will" of this "center". Every time the computer's interaction dependence of a person increases. The addiction to the work with the computer, a kind of computer mania stars developing step by step.

But in contrast to alcoholism and drag addiction there are more chances to release person from such an addiction. To do this one needs first of all analyze scrupulously the set of games, the game's process and psychological state of a person before and after the game.

We took an attempt to use computer games with psychotherapeutic aim and to trace their influence upon the psyche of a person who is in the state of anxiety, in posttraumatic situation. In the capacity of subsidiary material we used the game "Quake II" as a quite dynamic and easy learning game. At the initial stage we registered the feeling of sickness, slight dizziness and at the same time the feeling of competition. If a person conceals quite strongly his aggressiveness (he feels sorry to kill people even during the game, i.e. the mechanisms of psychological defense are quite strong), then the "revelation" of aggressiveness inside him may frustrate greatly.

One of the reasons of it is the resistance of the mechanisms of psychological defense, which are aimed to suppress subconsciously or not to allow into the consciousness the information which contradicts the demands of conscience, some definite moral qualities of a person and can traumatize him or provoke awareness of something the person does not want to know, which can be a kind of trauma as well.

When a person sits down the game which coincides in its scheme with the person's demands the process of "involving into the murder" starts. At the beginning "murder" of a rival happens under the influence of a factor "if you do not kill they will kill you". Then the awareness of the fact that you are the same as others takes place, i.e. you do not have a sense of pity towards "killed" but you have only heat and desire to "survive". In this case there is a great opportunity of development of headaches as subconscious aggressiveness coming out destroys to some extent the "I-Image". But on the other hand, displaced earlier emotion "attracted" to itself energetic potential of a person for its blocking, i.e. a person under the circumstances of up-bringing subconsciously took a lot of efforts for rejection of such attractions, which led automatically to the constriction of consciousness. It led to inadequate estimation of events happening around a person and in its turn led the inadequate reaction to those events. Actually a person reacted more to its own emotions towards the surrounding world than to the events which happened in it.

After several séances of successful game using the method of introspection and test for finding out the level of self-estimation, the lowering of anxiety was fixed, self-estimation increased, it became easier for the person to say "no" in the situations which do not satisfy him and so on. We consider that the developing of new programs and their influence upon the person depends to much extent upon moral qualities of programmers.

Taking into account everything mentioned we pose before the psychologists and developers of computer programs especially computer games the tasks connected with the increasing of psychological culture of interaction of computer users and working out psychological and psycho-preventive strategies and forms of work.

Under the condition of having strong computer addiction, it is possible to overcome it only when the stronger motivation of receiving pleasure from something else than the pleasure from the game is found, or when the strengthening of "I-Image" of a person or the influence of both factors simultaneously take place

Conclusion

We cannot speak about complete studying of mechanisms of addiction's formation. The problem of the influence of the computer upon the person is very extensive and many-sided. We analyzed three main psychological mechanisms of role computer game addiction's formation: the necessity of going away from the reality, the exception of the role of other and implementation of the desire to take revenge on oneself for previous pain (in our case for parents) in virtual reality. As practice shows, the awareness and realization of such desire very often (but not always unfortunately) brings to weakening (in some cases to disappearance) of subconscious addiction to desires that is to computer games. These mechanisms always work simultaneously, but one of them can prevail over the other in its strength of influence upon addiction's formation. They are based on the process of compensation of negative vital experience, so we can presume that they will not work if a person is completely satisfied with his/her life, does not have psychological problems and consider his life to be happy and productive. But there are not so many of such persons, that is why the majority of people can be considered to be potentially predisposed to the formation of psychological addiction to role computer games. There are some assumptions about the reasons of strengthening of aggressive manifestations in some cases, about the decreasing of them in other cases and staying without changes in third cases. But factors influenced upon these processes are still not studied enough and demand additional serious investigations

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