

# Experimental Model Of The Research On The Psychological Manifestation Characteristics Of The Phenomenon Of Addiction To Computer Games (In The Example Of Uzbekistan)

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**Abstract:** *This article highlights the influence of the computer on the human psyche, moreover, it clarifies what kind of psychological symptoms are undergone by "addiction to the Internet." Furthermore, the impact of spending a lot of time at the computer on the psychological and intellectual development of a child is discussed. Furthermore, the scientific and theoretical foundations for studying the problem of computer addiction are presented. Traditions of research of peculiarities of relations "person - computer" are analyzed.*

**Keywords:** *game, computer game, addiction, psychological symptom, virtual, real, euphoria.*

## 1. INTRODUCTION

There is no exaggeration that the actual problem of today, attracting modern researchers' attention, is the issue of human dependence on the computer in the issue of "human-computer" relations. This is no coincidence that, in our view, unlike other forms of unhealthy mental addiction (for example, gambling addiction), government control measures are not very effective in preventing computer addiction, as well as computer dependence is more common not only among different segments of the population, but also in the group of people (especially among young people) who form the basis of the productive forces, primarily expected to be highly socially active. As a whole, the actuality of scientific scrutiny of the problem is increasing in the context of the impossibility of reducing the possibility of potential negative impact of computer dependence on the individual development and, consequently, the development of society as a whole at the expense of administrative control mechanisms. Because in-depth scientific researches serve to determine both the content of the negative impact of computer addiction on the individual and society (which is necessary for

appropriate educational-propaganda work), and to identify the characteristics of computer addicts (which is important for early diagnosis and prevention).

It is clear that nowadays computer dependence is interpreted as one of the manifestations of addictive behavior, in science [12, p.16]. In foreign psychology, the problem of computer dependence has been studied since the 1980s. Psychotherapists, who used the internet in their activities in Internet companies were among the first to face these problems. The fact that led to arousal of interest in this problem was the anxiety on the formation of a pathological tendency in the employee to be on the Internet, which has a significant negative impact on the efficiency of the enterprise initially [12, p.29].

Definitely, the fact that the study of Internet addiction is scientifically and practically relevant is a serious and complex problem based on a number of studies [5], [7], [10], [11], and there are many aspects that combine it with the computer addiction. According to A.Y. Voyskunsky, one of the researchers [1], [3], [4] who conducted in-depth research on the study of the sound of human activity on the Internet, Internet addiction is manifested in the unwillingness to be distracted from working on it, even for a short time; frustration and nervousness from the situation of forced distraction. Moreover, it is manifested in the inability to plan a clear limit on working hours on the Internet, spending more and more funds to work on the Internet, especially funds for other purposes, giving false information to friends and family about working hours on the Internet, the ability to forget about tasks related to work and family life, educational activities during such work, intolerance of criticism from close people and leaders for such a situation, accepting the fact that addiction to work on the Internet can lead to family breakdown, loss of friends, neglecting the risk of personal health deteriorating at the expense of working long hours, often at night, personal hygiene due to the desire to spend as much time as possible on the Internet, neglect of diet, excessive consumption of coffee and other refreshments [2]. The criteria suggested by various experts for computer dependence can also be traced to similar symptoms in most cases: nervousness in the absence of computer contact and, conversely, a feeling of euphoria on the eve of communication (N.N. Aldukhov, G.Y. Galkin, 2000); regular increase of working hours on the computer, inability to stop such work, secondary relations with family and friends (L.N. Yureva, T.Y. Bolbot, 2006) and others. However, in our point of view, the interpretation of dependence on computers and the Internet as an exact phenomenon is nothing more than a confusion in the relationship between generality and particularity. Indeed, experts also point out that understanding Internet dependence as an obsessive tendency to work on a computer is to maximize its content [2], arguing that internet dependency is actually appropriate in the sense of being an integral part of computer dependence [12]. Furthermore, another aspect that supports our approach to the need for this differential approach is that the phenomenon of computer dependence began to be recognized by experts at a time when the Internet was not currently developed and mixed [2].

## 2. MATERIALS AND METHODS

The first major study to study the phenomenon of direct computer dependence was conducted in 1981 by the British psychologist-researcher M. Schotgen. Based on the results of a psychological study of more than a hundred subjects with computer addiction, M. Schotgen concludes that computer addicts are often the average 30-year-olds with higher education,

usually working in science or technology, and in more than 50% of cases the firstborn in their families [2]. According to M. Schotgen, most of them have a high level of intellectual development, a high level of theoretical and practical interest in electronics, even before starting to work on a computer. According to the researcher, it is important for such ideas to control the actions and thoughts of others, but they usually cannot achieve this, and computer control helps them to compensate for the unmet need for total control [2]. They constantly need positive intellectual stimulation, a need that cannot be met through social activism or sports. That is why, according to M. Schotgen, people addicted to computers have a high interest in mythology, astronomy, traditional philosophical and religious teachings, artistic creation, and even acting in the amateur scene. He points out that computer-dependent people are more interested in the process of achieving a task than in the practical outcome of an activity, which indicates that they have a predominance of procedural motivation.

As a whole, according to M. Schotgen, the formation of computer dependence is associated with a low level of social intelligence, while intellectual abilities are highly developed. Of course, the results of M. Schotgen's research deserve special attention for its comprehensiveness. In addition, there is a very important issue - the attempt to unravel the psychological mechanisms of computer dependence. However, the results of this study are disproportionate to a number of current evidence, it can be said that it was conducted at a time when modern computer technology was not developed as now it is and it was in its early stages of development. For example, it is no secret that one of the most common manifestations of computer addiction is addiction to computer games, which is more common among children and teenagers than among adults, as shown by M. Schotgen. Furthermore, M. Schotgen's explanation of computer dependence in connection with the poor development of social skills is incompatible with another form of computer dependence, that is the interest in the tools of the global network (chat, forum, e-mail, etc.), which in many cases expand the ability to communicate with other people on the basis of Internet addiction. In short, there is an objective need to bring research in this area to a modern level, making effective use of the experience gained in the study of computer dependence.

Modern research distinguishes five types of computer addiction: obsessive surfing (searching for information on websites), online shopping and games, fans of virtual dating, interest in pornographic sites and addiction to computer games [6], [8], [9], [13].

Thus, computer dependence as a destructive result of the "human-computer" relationship has been the subject of much research in recent years in psychology and related sciences, and the analysis of research in this area allows us to draw the following conclusions: first of all, among the various forms of computer dependence, the Internet addiction today is of particular great scientific interest, as a result of which, in most cases, these two phenomena are incorrectly interpreted as exactly one phenomenon. Computer addiction is seen in modern medical and psychological research as a type of nonchemical addiction, its similarities with other addictive forms of behavior are recognized, but a number of differences are noted. In the study of computer dependence, two main approaches are distinguished in terms of content: physical and mental disorders caused by computer dependence, as well as medical and psychological factors that contribute to the development of computer dependence. The psychology of a computer addict creates a complex clinical and psychological picture, and it

is clear from its content that computer addiction does not affect all layers and areas of mental life.

Our research on the psychological manifestation characteristics of the phenomenon of addiction to computer games is carried out on the basis of the developed concept. It is based on the cultural-historical theory of L. S. Vygotsky and the activity approach of A. N. Leontiev. After analyzing a computer game as a kind of independent activity, we identified all the components inherent in game activity in general: a historically emerging type of social practice, in which the norms of human life and activity are reproduced, the computer game arose from labor and has a social nature, requires obedience to the norms presented in the game, ensures the cognition and assimilation of objective and social reality.

A computer game as a type of activity influences the intellectual, emotional, moral development of a person. In a computer game, a warning of instincts takes place in relation to the future conditions of the struggle for existence ("the theory of prevention").

A computer game as an activity focused on obtaining "functional pleasure" connects play with orienting activity. The management of behavior is formed and improved in this activity.

The plot and content are the units of a computer game and at the same time the central point that unites all its aspects. In a computer game, the formation of an individual's arbitrary behavior, its socialization takes place. A characteristic feature of a computer game is its two-dimensionality, which is also inherent in dramatic art, the elements of which are preserved in any collective game.

The compiled characteristics of a computer game made it possible to reveal its influence on the formation of needs, leading activities and mental neoplasms.

Analysis of the influence of computer games on the psychological development of young people, teenagers and adults, made it possible to identify the prerequisites for the formation of various forms of dependence on a computer game, characteristics of all age groups, namely:

1. Stuck on the desire for functional pleasure.
2. Ability to escape from social reality.
3. An easy way to meet the leading age-related needs for social compliance (aged 7-8) in social competence (aged 8), in independent decision-making (aged 9-10), in independence (adolescence); in communicating with peers of the same sex, communicating with representatives of the opposite sex, solving the problem of self-actualization, self-knowledge and self-determination.
4. Distorted path of formation of mental neoplasms by the type of deviation from reality. While in the game the subject satisfies the needs, in reality, however, he has obvious difficulties, due to a number of circumstances: communication difficulties, low social status, conflict relations in the adult, peer, teacher system, low educational achievements, insufficiently developed motivational system. For example, in a game there is a motivation for achievement, while in reality the motivation for avoiding failure prevails.
5. In this case, a computer game allows you to compensate for the shortcomings and difficulties of social adaptation; helps reduce emotional stress, increase self-acceptance and a sense of respect.

6. At the same time, withdrawal from social reality exacerbates the internal conflict and determines the specifics of the “I” image and the consequences following from this: alienation, emotional impulsive inappropriate reactions, vulnerability of self-esteem, etc.
7. It is possible that there are age-related psychological characteristics of addiction to a computer game; the strength of addiction to a computer game is determined by the strength of a change in attitude to game activity;
8. Proceeding from the fact that mental development is based on the process of changing the leading need, leading activity and basic neoplasms, we assume that dissatisfaction with the leading age-related need becomes a prerequisite for the formation of dependence on play, not the development of the leading type of activity due to being stuck at an earlier stage development.
9. The study of the motivational sphere, the characteristics of adaptation (acceptance and rejection of oneself and others), the current status and characteristics of interpersonal interaction with the surrounding subjects with expressed manifestations of computer addiction will allow us to test our assumption and reveal some specific features of their mental development.

### 3. RESULT AND DISCUSSION

Determination of the prerequisites underlying the formation of computer addiction allows us to state the fact that there is a connection between the indicators of the syndrome of social maladjustment and dependence on computer games in the period from early to adolescence. The definition of this measure of connection makes it possible to correct the behavior of an addicted child, teenager and adults by means of using the means of play, increasing the adaptive capabilities of the individual. There is a need to study the influence of computer games on mental development in the period from early childhood to adolescence.

It is possible that in the manifestation of the phenomenon of gambling addiction, age characteristics are of particular importance. It is possible that at each age stage the phenomenon of “addiction to computer games”-ACG has a different effect on the formation of age-related neoplasms, affects the change in the motivational need-related sphere, influences the status position of an individual in society and determines interpersonal relationships.

When constructing an experimental study based on our concept, we identified the following stages:

**Stage 1.** Revealing the presence of addiction to a computer game using a questionnaire: “Methodology for determining dependence on computer games” (N.M. Dalimova).

Purpose: determination of the object of the experimental and control groups.

**Stage 2.** Identifying the features of the motivational sphere of the subjects of the experimental group using the test "Motivation to strive for success" (modification). Observing children in vivo. Conversation with children, teachers, parents (for primary school age).

**Stage 3.** Identification of the peculiarities of the emotional state in order to determine maladjustment in socialization using social psychological adaptation (SPA) technique (Rogers and Diamond).

**Stage 4.** Identifying the status position of the subjects of the experimental group. Sociometry methodology (according to Y.L. Kolominsky);

**Stage 5.** Determination of the specifics of interpersonal communication among representatives of the experimental group.

**Stage 6.** Mathematical data processing. Determination of the measure of communication. Methods of mathematical statistics.

**Stage 7.** Comparative analysis of data.

**Stage 8.** Identification of the sensitive period of the formation of dependence on a computer game.

The experimental group consists of testees with an expressed addiction to computer games. The experiment was carried out in three age groups. The first group of testees are between the ages 8 and 10, the second group - teenagers, the third group - adults. The experiment was carried out in high school and academic lyceum. In total, the testees consisted of 120 people aged from 7 to 17 ages. Each age experimental group has an average of 40 people. The experiment was carried out from 2015 to 2018.

Primary data are presented in pivot tables in the annexes. The following is a description of the research results in summary tables for each primary school age group.

Revealing dependence on a computer game among the subjects of junior grades from 7 to 9 ages using a questionnaire and observation made it possible to reveal the following indicators. The data are given in table 1.

Total 1. Indicators of the presence of dependence on computer games in %. A total of 120 subjects.

<b>Degree of addiction to a computer game</b>	<b>Testees aged 7 (n =)</b>	<b>Testees aged 9 (n =)</b>	<b>Testees aged 10 (n =)</b>
With a expressed indicator, dependence on computer games in %	19	15	12
With an unexpressed indicator, addiction to computer games in %	81	85	88

As the survey data show, the dependence on computer games in children aged 7-8 is higher than in children of 10 years old. Perhaps this is due to the fact that a computer game as a type of game activity at this age stage becomes an opportunity and a way to compensate for the satisfaction of the leading age needs of primary school age in social conformity, competence, and less often in independent decision-making.

The study and analysis of the research results allows to determine the specifics of the course of the phenomenon of "psychological dependence on computer games" in the period of primary school age.

As the analysis of the influence of computer games on mental development in primary school age shows, computer games, how a historically established type of activity contributes to the optimization of educational activity, can act as didactic teaching aids, is developed taking

into account knowledge about the formation of self-regulatory processes of activity. Promotes the development of cognitive activity, intellectual development, mastering the rules and norms of behavior.

Along with its positive characteristics, we identified negative aspects, such as escaping from reality, discrepancy between real and game norms and rules, striving for functional pleasure, getting stuck on lower-level emotions. Replacing the way of satisfying the leading age-related need - instead of the educational one, the testees take it from the game, which affects the formation of the Self-Concept, with the difficulties of the formation of emotional intelligence, the moral sphere of the individual.

#### 4. CONCLUSIONS

1. A computer game creates conditions for mastering educational skills, provides opportunity for the development of the intellectual sphere. Stimulates cognitive activity. Develops the motivational sphere and positively influences the formation of self-acceptance and self-esteem. However, if there are difficulties in communicating with peers, a teacher and a parent, a child of primary school age develops a dependence on a computer game.
2. It is possible that at this age stage a prerequisite for the formation of psychological dependence on a computer game is determined by the presence of maladjustment symptoms, namely: violations in communication in the system Teacher - Student, Child - Adult, difficulties in communicating with peers (low social status).
3. Since there are all the prerequisites that the primary school age (10-11 years old) is a sensitive period for the formation of psychological dependence on a computer game.
4. A computer game becomes an opportunity and a way to compensate for the satisfaction of the leading age-related needs of primary school age in social conformity, competence, and independent decision-making.

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