SUICIDAL BEHAVIOR PREDICTORS IN ADOLESCENTS WITH GAMING ADDICTION

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Abstract

In the modern world, the computer industry is gaining momentum in development, and computer technology is becoming increasingly accessible to the population. The relevance of the research is due to the necessity for a decision contradiction between the need to use a computer in the modern world, including adolescents and high rates of suicide among this group. The problem of studying computer games impact on adolescents in general and on suicide in particular has attracted psychologists’ special attention in recent years. The scientific works of Russian teachers, psychologists describe the computer games impact on the human psyche. The article covers the study of adolescents’ suicidal behavior with gambling addiction factors. The scientific literature theoretical review on the discussed problem is carried out. The research hypothesis is that suicidal behavior is mediated by the characteristics of the adolescents’ mental state due to their gaming addiction formation. An empirical study was conducted on the basis of secondary educational institutions in Kazan, the Republic of Tatarstan. The sample consisted of 100 adolescents at the age of 12-14. The mental state features of gambling addiction adolescents are studied. Indicators of suicidal behavior in adolescents were revealed. The relationship between gambling addiction, the mental state features and adolescents suicidal activity is substantiated. The study results can be used in psychological and pedagogical practice: when advising adolescents and their parents about the computer games impact on the mental state of adolescents and the possibilities of gambling addiction preventing.

Keywords: Suicide, adolescents, gambling addiction, addictive behavior, mental states.
1. Introduction

An important social problem of Russia’s national scale is suicide. In 2017 about 2,300 thousand suicides were officially recorded in Russia. Our country situation with child and adolescent suicides is extremely unfavorable especially due to death groups. According to statistics, 720 cases of child and adolescent suicide, which are also related to death groups, were recorded.

According to WHO, Russia is in emergency situation, because for a long time the quantitative rate of suicide is many times higher than the established critical level. The most critical is the age of adolescents from 12 to 17. Statistically, every 12th teenager in Russia annually makes a suicide attempt and a large number of them are completed (Granina, 2014).

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2. Problem Statement

The problem of studying computer games impact on adolescents in general and on suicide in particular has attracted psychologists’ special attention in recent years. The scientific works of Russian teachers, psychologists describe the computer games impact on the human psyche. The analysis of gambling addiction causes presents the diagnosis of adolescents’ computer addiction (Gogoleva, 2010; Yurieva, 2010; Druzin, 2011; Seravin, 2013; Galitsyn, 2014; Mendelevich, 2014).

Teenagers are more prone to computer addiction so in psychologists’ studies the most frequently considered issues are the computer games impact on adolescents since they are the main users and due to age-related psychological characteristics are unable to cope with the gambling addiction formation on their own. In this context, researchers Tserkovnikova (2011), Poselskaya (2014), Epanchintseva (2013) isolated teenagers in a "group of suicide risk" and note the fundamental difference between teenage and adult suicide.

Exploring the problem of suicidal behavior, the authors focus on risk factors for the suicidal behavior development (Bachilo, 2012), suicide prevention (Shkurichev, 2012), the adolescents suicidal tendencies diagnosis (Epanchintseva, 2013; Soldatov, 2013; Pavlova, 2013; Poselskaya, 2014), on the suicidal behavior of people with computer addiction (Ovchinnikov & Korolenko, 2014), on personality traits (Tserkovnikova, 2011; Pogodin, 2013).

Scientific literature research on the discussed problem allowed allocating several directions of works.

A number of authors consider factors leading to the development of gambling addiction. Kim et al. (2016) indicate that overuse of mobile phones (watching movies, visiting social networking sites) causes various types of addiction.

According to Cowlishaw & Kessler (2016), pathological gambling addiction is associated with mental health disorders (the appearance of neurotic conditions) and the formation of problems with the use of psychoactive substances.
Pathological gaming adolescents behavior, from the point of view Łabuzek et al. (2014), can lead to serious personal consequences, including criminal behavior, suicidal behavior (impulsive, obsessive-compulsive, dependent types).

The relationship between gambling addiction, delinquent behavior and substance use in adolescents is emphasized by Jayan (2014). Adolescents with gambling addiction show high levels of substance use and criminal behavior.

A number of authors (Mario, de Yolanda, & Liliana, 2011) note that men (boys) are more at risk of gambling addiction developing than girls (2.5:1) aged 10-14. In this case gambling addiction is associated with anxiety, alcohol, nicotine, psychoactive substances, depression, and impulsivity. These facts are confirmed in the works devoted to the impulsivity study in players (Grall-Bronnec et al., 2012).

In the next direction, a number of works should be indicated that reveal the factors and mechanisms of the suicidal behavior formation in gambling addiction people.

Kim, Salmon, Wohl, and Young (2016) emphasize that the increased suicide risk is observed among young Internet users who are not married and do not have a permanent place of study/work. A connection between suicidal activity with the use of alcohol, psychoactive substances, anxiety, and somatoform disorders was found. However, according to (Wyart et al., 2016), gambling addiction is a risk factor for suicidal attempts in elderly as well.

In addition, according to the results of Husky, Michel, Richard, Guignard, & Beck (2015), men are three times more likely to face gambling addiction problems than women. Men are more likely to be dependent on Internet games, sports games; women have gambling addiction. In this case, suicidal thoughts and tendencies more often occur in gambling addiction women.

This fact is confirmed in the works of Le Gris, Links, van Reekum, Tannock, & Toplak (2012). According to the authors, the increased suicide risk is observed in women with borderline personality disorders.

Martinotti and Bowden-Jones (2015) made the analysis of pathological dependence on gambling, their functions and consequences for the person. The authors identified the main players’ motives: a way out of a difficult situation, a desire to relax, a challenge to themselves and society, the excitement removal.

Taiwanese teenagers study revealed that the suicidal activity risk is associated with online games, online training, online watching movies, online shopping (Lin et al., 2014).

A number of authors consider the decision-making problem as increased suicide risk factor. Thus, Olié et al. (2015), a connection between the adolescents’ suicidal vulnerability and their difficulty in making decisions in social threat situations was found. Similar results were obtained by Sheftall et al. (2015) as well as in research on teenagers and adults with game addiction (Bridge et al., 2012; Pan et al., 2013; Ackerman et al., 2015).

Other authors’ studies have revealed an increased suicidal behavior risk in people with affective and eating disorders. Thus, a high suicidal activity was found in people with mood disorders, anxiety (Grant, Derbyshire, Leppink, & Chamberlain, 2014), in people with neurotic symptoms (Cowlishaw & Kessler, 2016), as well as due to the use of psychoactive substances, addictive disorders (Bosc, Fatseas, Alexandre, & Auriacombe, 2012).
As part of the third research direction, a number of works should be indicated on the family factor influence on the occurrence of suicidal readiness (Black et al., 2015; Jones et al., 2015). The frequency of suicidal attempts in gambling addiction people is higher if there is an appropriate pathology in the parents. At the same time there is a high probability of repeated self-harm after a complete suicidal attempt in adolescents in such families (Chan & Burd, 2012). Walls, Hautala, and Hurley (2014) found a relationship between suicidal activity and stressors, family injuries. Leppink and Grant (2015) indicate that young people who have suffered trauma in childhood have a high level of suicidality, low self-esteem and addictive disorders. Zhu et al. (2015) note that suicidal thoughts, gambling addiction, alcohol use are more often detected in adolescents who have been sexually abused in childhood.

3. Research Questions

The research hypothesis is that suicidal behavior is mediated by the characteristics of the adolescents’ mental state due to their gaming addiction formation. Object of study: adolescents’ suicidal behavior. Subject of research: suicidal behavior predictors of gaming addiction adolescents. The study was conducted on the basis of secondary educational institutions of Kazan, Republic of Tatarstan. The sample consisted of 100 adolescents aged 12-14.

An empirical study of suicidal behavior predictors in gambling addiction adolescents consisted of three stages. At the first stage, the severity level of gaming addiction adolescents was studied. At the second stage, the adolescents’ mental state features were studied in two groups. At the third stage, the relationship between gambling addiction, the mental state features and adolescents suicidal activity was investigated and substantiated.

4. Purpose of the Study

The study aims to identify factors of suicidal behavior in gambling addiction adolescents. To achieve this goal, the following tasks of empirical research were formulated: 1) to identify the existence and adolescents gambling addiction level; 2) to study the characteristics of the adolescents mental state; 3) to identify suicidal behavior indicators in adolescents; 4) investigate and justify the relationship between gambling addiction, characteristics of the mental state and suicidal activity in adolescents.

Object of study: adolescents’ suicidal behavior. Subject of research: suicidal behavior predictors of gaming addiction adolescents.

5. Research Methods

In accordance with the goals and objectives of the study the following research methods were used:

– theoretical: analysis of psychological, pedagogical literature, scientific and practical works on the research problem;

– empirical: observation, conversation, questionnaire, diagnostic testing according to K. Young methodology in adaptation to gambling dependence by Grishina (2014), methodology for
Suicidal Activity Assessment (Razuvaeva, 2014); G.Y. Aysenk questionnaire “Self-assessment of personality mental states” adapted to adolescence by Peresheina and Zaostrovtskaya (2006);

- methods of mathematical data processing.

6. Findings

According to the study results of the severity level of gambling addiction adolescents, two groups of subjects were identified: Group A – teenagers without a penchant for gambling computer addiction; Group B – gambling addiction adolescents. The following distribution of subjects was obtained: 39% adolescents build adequate types of interaction with a computer game; 61% adolescents are characterized by an addictive type of interaction (gambling addiction).

In group A self-control indicators in computer game are dominated (36%), and parents negative attitude to computer games (29%). The least expressed indicators are: the target orientation in the game (18%), emotional attitude (12%), preferences for virtual communication in a computer game to real communication (5%). Group B indicators: the target orientation for a computer game (39%), a positive emotional attitude to computer games (31%), and preferences for virtual communication in a computer game to real communication (22%). Indicators of negative parental attitude to computer games (4%) and self-control in computer games (3%) are poorly expressed.

The study also revealed a high degree correlation between the target orientation and other indicators (the value of the multiple correlation coefficient R=0.86, p<0.001). Based on obtained data, it can be concluded that the degree of computer games enthusiasm is largely determined by the level of target orientation to them.

The severity level of all components of the adolescents’ mental state with gambling dependence is statistically higher than in adolescents with no signs of addictive behavior. Thus, gambling addiction adolescents are more aggressive, not sustained in relation to people, have difficulties in communicating with society, anxious, restless, emotionally unstable, have low self-esteem, afraid of difficulties, failures, have difficulties in changing their beliefs, attitudes, behavior.

Almost all of suicidal activity indicators of gambling addiction adolescents are significantly higher than in adolescents with no signs of addictive behavior.

The correlation analysis revealed the relationship between the parameters that make up the predisposition to suicide and gambling addiction adolescents.

The greater the emotional appeal of a computer game for teenagers with signs of addiction, the more they develop a negative mental state due to the inability to satisfy their needs. This condition is manifested in adolescents in the experiences of frustration, anxiety, irritability, despair. At the same time, the greater the teenager’s dissatisfaction with his needs, the more he gets involved in a computer game, constantly striving to achieve higher results experiencing aggression. Experiencing a high level of anxiety, adolescents are unable to distract from the game, interrupt it, plan the end. And they experience irritation and aggression when forced to withdraw from the game. Moreover, the higher the level of aggression in a teenager, the less he establishes communication links in real communication.
The lack of intention among adolescents to change their behavior towards computer games is directly related to the parents’ indifferent attitude to such hobbies, and the absence of their prohibitions. And it’s only strengthened the adolescents desire to change real communication with virtual.

A systemic factor of adolescents’ suicidal behavior with game addiction (group B), is a positive emotional attitude towards the computer game.

Thus, in the course of the empirical study the following results were obtained:

1. Gambling addiction adolescents are characterized by a strong focus on a computer game, an emotional attitude towards computer games, and preferences for virtual communication in a computer game to real communication. High school students are aware of parents’ positive attitude to computer games: their satisfaction with the child’s employment at home with computer game. 2. The mental state of adolescents with gambling addiction is characterized by pronounced anxiety, increased frustration and aggressiveness. 3. Gambling addiction adolescents have a great emotional appeal from a computer game, which directly forms their negative mental state due to the inability to meet teenager needs. It is adolescents’ emotional experience of frustration, anxiety, irritability, despair, that in a chronic state leads to depression. 4. Gambling addiction adolescents’ dissatisfaction with their needs leads to greater rigidity it leads to the increased adolescent aggressiveness, preference for virtual communication to real. 5. Gambling-dependent adolescents are characterized by a lack of intentions to change their behavior to computer games due to the absence of their parents’ negative attitude. 6. Gambling addiction adolescents are characterized with high anxiety which leads to the desire to play constantly, unwillingness to interrupt the computer game, irritation when forced distraction from the game. 7. Gambling addiction adolescents’ inability to plan the end of the game that causes them to increase aggression. 8. Suicidal activity indicators are significantly higher in gambling addiction adolescents. 9. The system-forming factor of suicidal behavior of gambling addiction adolescents is the emotional attitude to the computer game, while for teenagers with no addiction signs such a factor can be determined by the target orientation in a computer game.10. Suicidal behavior is mediated with the mental state features of adolescents due to their gambling addiction formation.

Based on the obtained results, we can say that excessive interest in computer games forms gambling addiction in adolescents, which adversely affects their mental state and forms suicidal behavior. Thus, gambling addiction adolescents are more prone to suicidal behavior than with no sign addictive behavior adolescents.

7. Conclusion

The mental state of gambling addiction adolescents is characterized with pronounced anxiety, increased frustration, increased aggressiveness. Gambling addiction adolescents have a strong focus on computer games, a positive emotional attitude to computer games, and a preference for virtual communication in a computer game to real communication. Suicidal activity indicators are significantly higher in gambling addiction adolescents. Suicidal behavior is mediated by the peculiarities of the adolescents’ mental state due to their gaming addiction formation. The results of this study can be used in psychological and pedagogical practice: when advising adolescents and their parents about the computer games impact on the mental state of adolescents and the possibilities of gambling addiction preventing.
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