



## Behavioral risk factors for suicide among adolescent schoolchildren

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**Abstract.** The studies devoted to suicide risk factors are of importance because they define the transition from intent and conflict to the realization of the intention in the form of a suicidal act. In this study, three groups of people undergo a survey on the behavioral factors for suicide risk and findings are presented alongside interpretation. The survey shows that the suicidal situation is considered the most serious by the third group (the adolescents), as evidenced by the absence of low scores among the given suicidal factors. At the same time, respondents in all three groups believe that drugs and substance abuse have the greatest influence on the formation of suicidal behavior in adolescents. Thus, the suicidal situation among the adolescent population is unfavorable and requires the adoption of urgent measures to improve it. The study provides recommendations for reducing behavioral risk factors for suicide among adolescent schoolchildren.

**Keywords:** Adolescent schoolchildren, self-destructive behavior, suicidal behavior

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### INTRODUCTION

About one million people worldwide commit suicide every year. Given that data from statistics indicate the apparent cases of suicide, the real suicide rate may be 2 to 3 times higher. In 2018, Kazakhstan saw a suicide rate of 27.5 per 100 thousand population. Since January 2018, there were 390 suicide attempts registered in the country, which is almost equal to the corresponding amount (401 cases) in the same period in 2017. Out of registered suicides, twenty involved adolescent girls and four involved children (Bulletin of the World Health Organization, 2018). The Committee for Legal Statistics and Special Accounts of the Republic of Kazakhstan reported 3.542 suicides (178 of which involved minors) and 4234 suicide attempts in 2018 (Analytical Information, 2017).

Data from statistics indicate that minors represent the greatest group being at risk of suicide. Risk factors for suicide are family distress (including suicide or suicide attempt of a family member); the increasing incidence of psychological pressure inflicted by both peers and teachers; school bullying; weak psychological stability (depression, lack of willpower, auto-aggression). The Committee for Legal Statistics indicates that the general causes suicidal activity in children and adolescents are destructive interpersonal relationships, low stress tolerance, information overload, and psychological instability. Another reason is that a person seeks to protest and attract attention (Analytical Information, 2017). According to the WHO Mental Health Action Plan 2013-2020, the rate of suicide in countries will be reduced by 10% by the year 2020 (Bulletin of the World Health Organization, 2018). In this regard, this study is based on the ideas of S. Freud concerning the essence of suicide. According to him, a human has two primary conflicting instincts: the life instinct [Eros] and the death instinct [Thanatos]. The Eros loses his power as a person ages, while Thanatos becomes more and more powerful and assertive. Thanatos fulfils oneself only by causing death of the person. According to Freud, suicide and murder are manifestations of the destructive influence of Thanatos or aggression

(Carr & Lapp, 2006). Researchers who study issues surrounding suicide partially agree with this (Tikhonenko & Safuanov, 2016; Mokhovikov, 2017; Vagin, 2018). They also claim that in recent years, the death instinct often prevails over the instincts of young people.

At the current moment, there are several classifications of risk factors. Thus, risk factors are divided into topical (acute) and chronic suicide risks. In conjunction with acute risk factors, such as a stress due to relationship termination, chronic risk factors, such as mental disorders, such as depressive or bipolar disorder, significantly increase the likelihood of suicidal behavior (Beautrais, 2000; King, Foster & Rogalski, 2013). In addition, it is proposed to divide risk factors into recent (e.g., symptoms of depression coupled with feelings of resentment, hopelessness, loneliness, anger) and potential (e.g., family disharmony, and disharmony of personality structure (Bannikov, Koshkin, Pavlova & Letova, 2015). According to American psychologists, the suicide danger and risk are largely associated with the Internet use. Thus, those who play video games or dive into the Internet for more than 5 hours a day may be at risk of developing depression and suicidal thoughts (Messias, Castro, Saini, Usman & Peebles, 2011). Of particular concern is the use of Internet by adolescents with suicidal ideas to search for suicide-related information. Such searches stimulate suicidal behavior with a high probability of completed suicides (Hagihara, Miyazaki & Abe, 2012).

Social and ethno-psychological factors are also referred to as suicidal risk factors. Zheng and Wang (2014) distinguish demographic and psychological factors as social risk factors. Their study proves the need for a multi-factor approach to understanding and preventing suicide by college students (Zheng & Wang (2014). Thus, Turkish researchers constructed a profile of uncompleted suicide attempts regarding individual, social and psychological factors (Iskender et al., 2016). These factors explain the surge in suicidal activity in individual countries and regions. Thus, in some republics of the Russian Federation (i.e., Tuva Republic, the Republic of Buryatia, and the Republic of Sakha), the relative suicide rate is several times higher compared with other regions (Polozhiy & Panchenko, 2012). In the US, higher suicide rates are recorded among American Indians and indigenous people of Alaska (Beautrais, 2000).

Among social factors of suicidal behavior, there are family factors (in particular, mental health problems, family history of suicidal behavior, relationships, affection and conflicts) and peer relationships (including the acts of bullying). Factors, such as family and sexual abuse, the neglect of child's needs, and relationships with parents, are often encountered in situations of suicidal behavior of adolescents; foreign researchers have been mentioning this for many years (Fergusson et al., 2000; Stewart et al., 2015). In addition, the loss of a parent to death or divorce, or living apart from one or both biological parents is a significant risk factor (Bridge, Goldstein, R & Brent, 2006).

Parental divorce is one of the frequent causes of suicidal behavior among Lithuanian adolescents. Some manifestations of suicidal behavior were significantly associated with low satisfaction in family relationships, low father's and mother's emotional support, authoritarian-repressive father's parenting style, and permissive-neglectful mother's parenting style (Zaborskis, Sirvyte & Zemaitiene, 2016). A powerful suicide risk factor is the parental history of suicide attempts, which conveys a nearly 5-fold increased odds of suicide attempt in children (Brent et al., 2015). The behavioral risk factors for suicide include personality and individual differences, cognitive factors, social aspects, and negative life events; identity factors (especially gender identity, gender and sexual preferences) (O'Connor & Nock, 2014). There is a strong effect of sexual orientation on suicidal thoughts. This effect mediated by critical youth suicide risk factors, including depression, hopelessness, alcohol abuse, recent suicide attempts by a peer or a family member, and experiences of victimization (Russell & Joyner, 2001).

The terms "auto-traumatism" and an "auto-aggressive" act are often used in the literature to define suicidal actions. If the ultimate goal of an auto-aggressive act is to commit suicide, then it should be labeled a suicidal act. In modern-day literature, especially in the Western literature, there are popular terms like "self-destructive" or "indirect self-destructive" behavior. The indirect self-destructive behavior refers to the act of inflicting aggression on oneself. Indirect self-destructive people have intentions that are not directly related to death or conduct self-harm with a motive that is not to be determined. Some studies demonstrate people with indirect

self-destructive behavior who engage in interactions during which unintentional harm is inflicted. In other words, actions of indirect self-destructive people are aimed at causing direct or indirect damage to one's own somatic or mental health. These actions threaten the integrity of personality and have a negative effect on personality development (Andronnikova, 2010; Tormosina, 2014; Kerig, 2017; Firestone, 2018; Tull, 2018).

In foreign suicidology, the interest in self-harm is associated with the influence of media on the suicidal behavior (Hawton, Saunders & O'Connor, 2012; Daine et al., 2013). In an article analyzing the influence of online images on self-harm in individuals aged 16-24, the authors emphasize a vital role that the Internet plays in young people self-harm practices (Jacob et al., 2017). This study sees suicidal behavior as a form of self-destructive behavior, a kind of self-directed violence, which is not in the human nature. By contrast, anti-suicidal behavior is a form of creative behavior, which is a natural characteristic of a human being. While the suicidal behavior is a decrease in energy (vital activity) in the favor of death instinct (avital activity), the anti-suicidal behavior is a natural rise of vital forces or energy, positive thinking, and an optimistic attitude. The latter is not dependent upon success, stress, and other circumstances arising in life (Vagin, 2001). To create a system for preventing suicidal behavior among adolescents, the study has to conduct a comprehensive analysis of common suicide risk factors and a thorough analysis of those factors that are more likely to cause suicidal vulnerability. Unlike other behavioral factors (macro-social factors like media influences, the Internet use, and social stratification by material wealth; psychological factors; psychopathological factors; micro-social environment factors, etc.), suicide risk factors are dangerous, as they do not provoke suicidal behavior but mark its initial stages. In this regard, this group of the most dangerous, difficult preventable factors requires a special investigation. Parents, teachers, school psychologists, social teachers, and adolescents may need the knowledge of these factors to recognize suicidal danger in time and take action. The study of behavioral risk factors for suicide may be the framework for an early diagnosis of suicidal tendencies among adolescents. The purpose of this article is to highlight the most significant behavioral risk factors for suicide in urban adolescents.

Behavioral factors were identified by the authors as a group of the most dangerous factors, which are difficult to prevent. Therefore, this study tried to draw public attention to these risk factors for early recognition by people around them. In the authors' opinion, the study gave the General public an opportunity to look at the problem as large-scale and dangerous for the population. For international literature, the study is valuable as a popular (not clinical) and available for reading to the uninformed person.

## **MATERIALS AND METHODS**

### **Research design and sample**

This study identifies the most significant behavioral risk factors for suicide among adolescents in Almaty via a survey involving three groups of people. The first group includes psychologists employed in educational establishments, employees of psychological agencies, and health professionals employed in general medical hospitals. The second group includes law enforcement officers, including those working with delinquent minors, adolescents who attempted suicide or have suicidal tendencies.

The third group was represented by randomly met teenagers, boys and girls aged 14 to 22 years. A special mini-survey asked respondents to identify those behavioral risk factors that have the greatest influence on adolescent suicidality and/or to choose them from the list. In the study, the authors did not focus on the gender and age of the respondents, it was a random sample, and anonymous. Answers were given by those who agreed to participate on their own initiative.

The survey sample is 437 respondents, who live, study and work in Almaty, thereby are acknowledged with the social life of local society, of which the first group includes 183 professionals, the second – 64 law enforcement officers, and the third – 190 adolescents.

The structure of the interview was built on previous studies in this field (Kassen et al., 2016), according to which there are 14 main factors affecting the suicidal actions of adolescents:

1. Alcohol and substance abuse;
2. Running away from home;
3. Self-isolation from other people and life;
4. Sharp decrease in daily living activity;
5. Change of habits (non-compliance with personal hygiene practices);
6. Interest in reading and talking about death and suicide;
7. Frequent listening to mourning or sad music;
8. Putting affairs in order (resolving conflicts, writing letters to relatives and friends, giving away possessions);
9. Sudden changes in behavior and mood, especially those alienating an individual from relatives;
10. "Flirting with danger";
11. Visiting a doctor without obvious need;
12. Disruptive behavior or decline in academic performance;
13. Parting with expensive possessions or money;
14. Purchasing things needed to commit suicide.

The above factors were applied when interviewing respondents. The number of indicators was narrowed in order to:

- achieve representativeness of the results;
- reflect the society where the study was conducted;
- take into account cultural factors.

The decrease in the number of indicators had a positive effect on minimizing technical errors in data processing. With the help of a focus group of 20 experts in the field of cultural studies and sociology, out of 14 assessment criteria factors, 7 the most relevant ones were selected. As they are really relevant for the modern society of Kazakhstan and, especially, Almaty. Then the structure of the interview was as follows Table 1:

**Table 1.** Interview survey structure

	1	2	3
Stages and Questions	Give an impact assessment for each of the following factors from 1 to 100, where 1 - factor has a minimal impact, 100 - factor has a maximum impact:	In your opinion, what is the main reason for suicidal tendencies among adolescents of Almaty?	In your opinion, what can be done to prevent suicidal tendencies among adolescents?
	1) loss of interest in learning; 2) running away from home and vagabondism; 3) alcohol craving; 4) interesting in listening to mourning or sad music; 5) self-isolation and decrease in living daily activities; 6) drugs and substance abuse; 7) interest in death and suicide related topics.		

## Data analysis

The relevance of survey data is justified by the purpose of information gathering (to highlight the most significant behavioral risk factors for suicide among urban adolescents). In addition, two groups of people consist of professionals, who use to deal with similar problems, and the third group includes representatives of the youth, who know the problem “from the inside”.

Encouraging law enforcement officers to take part in a mini-interview was a challenge because employees working with adolescent suicides make effort to evade this problem due to personal helplessness and lack of professionalism. After the officers learned about the fact stating and trend identifying, rather than performance evaluative, mission of the survey, only 64 employees out of initial 183 volunteered to participate. The sample of adolescents grew from the expected 183 to 190 due to the interest in questions raised.

The answers to question No. 1 were ranked for each respondent. For each indicator, the normalized value was calculated according to the formula  $x = \frac{X_{fact} - X_{min}}{X_{max} - X_{min}} 100\%$ , where

$X_{fact}$  – the respondent's assessment,  $X_{max}$  and  $X_{min}$  are the extreme indicators of the scale. After that, the indicator of the weighted average was determined for each indicator of each category of respondents.

Answers to questions No. 2 and No. 3 were grouped into categories with answers with similar descriptions (since the questions were open-ended), where a dominant opinion was determined among the groups of respondents.

## Validity and reliability of results, as well as study limitations

In the course of the study, the authors did not take into account the factor of the age limit of adolescents, about whom respondents were asked questions. Firstly, the authors did not determine the exact age of adolescents about whom the authors asked questions to respondents, which could lead to a different interpretation of the question and affect the answers. Secondly, adolescence is physiologically “turbulent” for the mentality. Thereby the tendency to suicidal actions in adolescents can be due to the physiological state of the growing organism, and not to the conscious expression of the will of the person. In age psychology (Vagin, 2001; Myagkov, 2003; 2004; Altynbekov et al., 2009; Stadukhina et al., 2013; Brown & Jager-Hyman, 2014; Randall et al., 2014; Yen et al., 2015; Franklin et al., 2017), adolescence is a period of heightened sensitivity and vulnerability. As a result, an adolescent is vulnerable to subjectively unfavorable circumstances and actions that, in his/her opinion, characterize his/her maturity and independence.

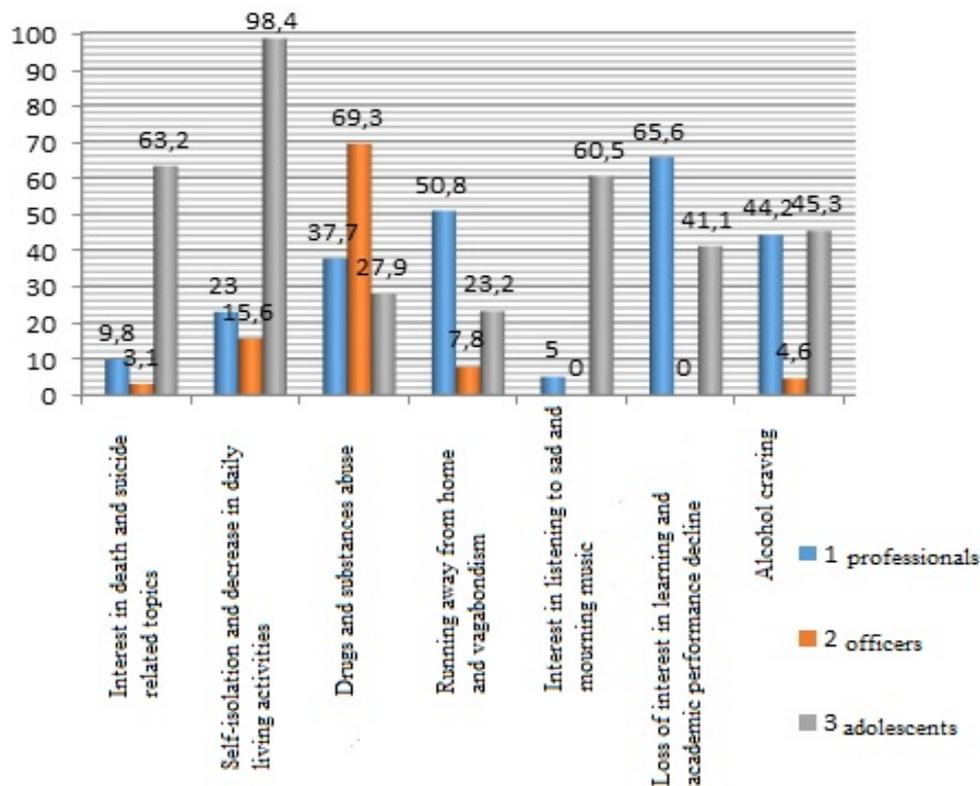
The structure of the survey was based on the methodology of one study (Kassen et al., 2016), so as not to overlay the methods and approach of different authors, however, the study (Kassen et al., 2016) had its own limitations that affect the current research as well. The authors also admit that the subjectivity of the group of experts in the focus group influences the reliability of the study, based on which a list of criteria that formed the basis of the study was determined.

## RESULTS

Figure 1 displays the results of a mini-interview. According to professionals, who work with adolescents, the risk of suicide will increase significantly if the student loses interest in learning, lags in academic performance, and diminishes previously good attendance record. This behavioral factor scores 65.6% on a scale of influence, as most schoolteachers and psychologists noted its pathogenic effect. The following factors are the act of “running away from home” and vagabondism: 50.8% of influence professionals gave to this reason for suicide.

The third and fourth places of influence are occupied by alcohol craving (44.2%) and drugs/substance abuse (37.7%). Respondents who emphasized both of these factors are employees of psychological agencies or health professionals, who interact with suicidal adolescents more often than school teachers and psychologists. Among risk factors, a decrease in daily living activities holds a fifth position: it has 23% of influence. When answering question No.

2, 78% of specialists believe that the causes of suicidal tendencies in the society of Almaty are personal immaturity, low self-esteem, communication incompetence, and the lack of parental support. According to employees of psychological agencies, adolescents, who did not receive the warmth of family love, often leave their home due to the destructive influence of the family and are most prone to commit suicide. When answering question No. 3, there were fewer similar answers among specialists. 41% of specialists suggest that working with parents through raising their level of knowledge about emotions (their healthy manifestation) and adolescent changes can serve as the main preventive action. Other answers to questions No. 2 and No. 3 were similar in groups of up to 7% of specialist respondents, thereby they did not reflect the dominant opinion in this group of respondents.



**FIGURE 1.** The influence of behavioral risk factors for suicide according to respondents

The majority of professionals do not consider the interest in death and suicide related topics as a crucial factor (only 9.83% of influence). The same is true for the interest in listening to sad and mourning music (4.97%).

The second group (law enforcement officers) was categorical in their choices. From Figure 1 it is clear that the respondents-officers suggest that factor 1 has a significant influence (drugs and substance abuse), which is very different from estimates of other factors. That is, there is a categorical dominant opinion on this issue among law enforcement officers. This is explained by the nature of their work, which affected the relationship with other spheres (many refused to give answers, as they believed that the researchers were journalists).

The leading behavioral risk factor is the drugs/substance abuse – almost 70% of influence officers attributed to this factor. The majority saw factors, such as self-isolation, decrease in daily living activities (15.6%), “running away” and vagabondism (7.8%), alcohol craving (4.6%), interest in death and suicide-related topics (3.1%). Not unlike professionals, the officers expressed disbelief in that the interest in death and suicide related topics and listening to sad and mourning music can affect the development of suicidal tendencies and they did this even in a more categorical form. None of them emphasizes these factors as significant.

When answering question No. 2, 92% of the officers answered that manifestations of idleness are the causes of suicidal tendencies, which comes from improper upbringing in the

family or social immaturity of new generations. When answering question No. 3, 62% of the officers answered that the loss of interest in learning, declining academic performance, and absenteeism are factors contributing to deviance and illegal behavior (Shestak, Volevodz & Alizade, 2019). Therefore, the work with these aspects, changing the situation with them, will become the main preventive action against suicidal tendencies. Other answers to questions No. 2 and No. 3 were not grouped as they were not similar but represented scattered private views within the second group of respondents.

Respondents of the third group assign the self-isolation factor to the role of that influencing the formation of a suicidal personality: 98.4% of influence have self-isolation and decrease in daily living activities. Adolescents view this factor as the most dangerous because if caused by social rejection it may result in developing ideas of one's own inferiority and death. The interest in death and suicide related topics was noted as a significant suicidal factor by 63.2% of influence for adolescents, who reported on its effect on them, which could lead to suicidal behavior if it had not be for anti-suicidal factors (the support of loved ones, relationship with friends, engagement in sports, etc.). The same is true for the interest in listening to sad and mournful music (60.5% of influence). An interesting fact is that these two factors were not classified as significant by professionals and officers, although they are in close interaction with adolescents.

This point of view corresponds to that of suicidologists regarding the crucial and often the leading role of the emotional semantic component of human psychology (Andronnikova, 2010; Bannikov, Koshkin, Pavlova & Letova, 2015). Nevertheless, the inconsistency that this survey reveals may indicate that professionals and officers lack the necessary psychological knowledge, or are insufficiently enlightened about suicide related matters, or are reliant on personal experience. According to adolescents, alcohol craving has influence of 45.3% among suicide risk factors. The loss of interest in learning, decline in academic performance, and absenteeism have similar percentage of influence (41.1%) on adolescents. A relatively high score is given to drugs/substance abuse - 27.9%, a "running away from home" and vagabondism have an impact of 23.2% on suicides. When answering question No. 2, 79% of the respondents of the third group noted that the main reason for the suicides in Almaty among adolescents is the lack of support from the school and parents due to the "generation gap" in values. Thus, according to the respondents of the third group, the problem is in the absence of confidential communication, where there is no criticism, condemnation and depreciation. Other answers to question No. 2 were not grouped because they did not have similar features. When answering question No. 3, 36% of respondents said that anonymous psychological services could prevent suicide. 28% of the third group respondents said that regular tests of mental and physical health could be a preventive action (including identification of addiction). Such tests could prevent the development of psychiatric and health disorders. In authors' opinion, such results testify to the interest of adolescents in living in a healthy society, where there is trust in adolescents who are not perceived to be potentially unreliable. In a society, where sincere attention is paid to their problems (physical and mental), and conflicts and problem situations are not solved with the help of punishments.

The survey shows that the suicidal situation is considered the most serious by the third group (the adolescents), as evidenced by the absence of low scores among the given suicidal factors. Moreover, they view risk factors like the interest in death and suicide and the interest in listening to sad and mournful music as crucial. Figure 1 shows that among these factors, the most significant are considered self-isolation, decrease in daily living activities, drugs and substance abuse. At the same time, the majority of respondents in all three groups believe that drugs and substance abuse has the greatest influence on the formation of suicidal behavior in adolescents. It is true that increased sensitivity makes adolescent inadequately sensitive to external stressors. The inertness and mental rigidity cause a fixation on negative experiences, which is aggravated by psychoactive substances.

## DISCUSSION

According to law enforcement officers, among adolescents who committed suicidal acts, 75% occasionally tried toxic and even addictive substances. There is an opinion that the use of alcohol and drugs by adolescents is one of the most powerful suicide risk factors (Vagin, 2001). It is usually preceded by a period of unstable mood, short temper, dissatisfaction with previous activities and social circle, and depression. This is when an individual loses interest in learning, when conflicts arise in the family, and when “street leaders” become figures of authority in the eye of an adolescent. These “leaders” encourage the first intake of alcohol and drugs. The experienced sensations temporarily grant satisfaction and the feeling of serenity but when parents find out about this fact and start a “struggle” using punishment and pressure, an adolescent may react with strong emotions and protest. Thus, the further use of substances becomes a protest, “a challenge to society,” and, above all, to those around an adolescent.

Another reason for substances abuse may be the uncontrolled thirst of adolescents for new sensations and role-play. If adults start explaining the danger of a drug addiction, criminal or asocial future, then they will be “unheard” due to a temporary decrease in parental authority in the favor of another adolescent. During this period, adolescents may feel the impact of parents, teachers, law enforcement officers, etc. As a result, pedagogically illiterate adults may inflict too much pressure on an adolescent and push him/her to suicide.

There are no similar studies with the participation of several groups of respondents. Similar studies also explore behavioral risk factors without clearly distinguishing them. Thus, there are a meta-analysis outlining the potential risk factors (Chang et al., 2016); a prospective study exploring the family factor (Brent et al., 2015); a study devoted to psychological factors, such as childhood abuse and disinhibition (Stewart et al., 2015); and a study concerning social networks (Zimmerman et al., 2016). Unfortunately, foreign studies do not distinguish between mental disorders, affective disorders, disorders associated with drugs abuse, schizophrenia and personality disorders. In general, researchers define them as a personality factor (Britton & Conner, 2010; Schneider, 2012), whereas in Russian suicidology, pathopsychological inclinations and behavioral deviations are considered as completely different risk factors (Myagkov, 2004; Tormosina, 2014; Bannikov, Koshkin, Pavlova & Letova, 2015; Vagin, 2018). Similar to this study in methods are a study that performs a mass assessment of suicidal behavior and risk among children and adolescents (Goldston, 2000), an online survey (Podlogar et al., 2015), and a study detecting suicidal ideation in online user content (Ji et al., 2018).

The online screening tools for suicide risk assessment are becoming more common but they are linked to many difficulties compared to traditional methods. As we can see, researchers often do not use mass methods – they prefer working with a specific sample or more complex methods. For example, Canadian authors constructed a profile of suicidal attempts using several risk factors and warning signs, which they noticed among psychiatric patients (Bhatt et al., 2018). They applied a multivariable logistic regression analysis but dismissed sociodemographic risk factors, as they might not apply within psychiatric populations.

A meta-analysis of 365 studies that have attempted to longitudinally predict a specific suicide-related outcome over the past 50 years produced several unexpected findings (Franklin et al., 2017). These findings were made across odds ratio, hazard ratio, and diagnostic accuracy analyses. The prediction was only slightly better than chance for all outcomes because the combined effects of several risk factors have rarely been studied. The authors also indicate the homogeneity of their research. It turns out that many researchers do not touch upon behavioral risk factors due to the ambiguity of their structure, causelessness, and abrupt stress-related dynamics. However, a suicide risk in adolescence has a multifactorial nature, which includes both psychopathological and psychological mechanisms, as well as environmental and social factors. The growth of auto-destructive tendencies at this age, followed by a choice of committing suicide to solve the emerging problems, requires thorough analysis of adolescent’s personality, his/her interpersonal relationships, education and other circumstances (Cherkasov et al., 2019a). This will allow designing strategies for suicide prevention, as well as forms and methods for psychological and social support.

The interview survey allows us identifying the core reasons for the formation of suicidal tendencies in adolescents. These reasons linked to the failures of socialization process. Socialization is the process of forming a personality; the process of learning to behave in a way that is acceptable to society; the process of learning socially significant characteristics of consciousness and behavior that govern the relationship with society. Primary socialization occurs in the family, within which the whole complex of socially significant human qualities should be formed: morality, knowledge, conviction, diligence, culture, education, communication competence. Further socialization takes place in the school setting (Cherkasov et al., 2019b). Unfortunately, both types are not fully effective.

A hermeneutic analysis of criminal case files or data from forensic mental state examination of adolescents, who attempted/committed suicide, is a promising method for analyzing suicide risks. A hermeneutic analysis may also cover characteristics of mental development, personal characteristics, family relationships and situational circumstances that preceded suicide. This will allow an analysis of factors from the viewpoint of temporal development and mutual interaction. Such studies allow drawing a complete picture of what has happened alongside the conclusions about the core factors of suicide risk for each particular case and thus, contribute to the concept of suicidal behavior in adolescence.

During the study, a significant gap was found in the estimates of different groups of respondents. The authors believe that this is due to the absence of accurate descriptions for the factors based on which the assessment was conducted. Along with the intragroup cognitive distortions that occurred among respondents. Primarily, the cognitive distortion of professional deformation, when a person cannot evaluate the situation objectively, but bases on his/her professional experience. Along with cognitive distortion "curse of knowledge". Thus, there are difficulties for informed people when they try to consider any problem from the point of view of less informed people.

Almaty is located near the border of Kazakhstan with Kyrgyzstan and China, where suicidal topics are not acceptable for wide discussion. Along with the close interaction of specialists on the problem. The said could lead to a decrease in the awareness of the respondents about the problem that is not directly related to their professional activity (Kassen et al., 2016). The structure of the society of these countries and adopted family hierarchies (values, orders, traditions) confirm the opinion of the third group respondents about the significant gap between generations and the lack of interaction between elders and younger ones. Thus, the problem of suicidal tendencies of adolescents is deeply connected with cultural factors. These factors should be taken into account when solving this problem, when implementing the proposed below.

To reduce the influence of behavioral risk factors for suicide among adolescent schoolchildren:

1. Have regular awareness sessions with parents and staff concerning the harmonious education of children, the psychological characteristics of their development, mental health, risk factors and signs of suicidal behavior, and the need for timely visits to psychologists and psychiatrists in cases of inadequate or abrupt changes in adolescent's behavior;
2. Organize differentiated suicide prevention classes for teachers, health professionals, psychologists and other specialists engaged the interaction with children and adolescents;
3. Train school doctors and psychologists to diagnose depressive and other suicide-prone conditions;
4. Include medical and psychological examinations into the program for annual medical exam.

## CONCLUSION

Most of the respondents assigned high scores for risk factors like self-isolation, decrease in daily living activities, and drugs and substance abuse. The identified behavioral factors are a kind of nutrient medium for the suicidal behavior to develop. They usually affect adolescents in conjunction. The analysis of behavioral risk factors portray a minor, who is prone to the

commission of suicide. It should be borne in mind that the adolescent suicidal behavior has specific characteristics. An adult is usually able to resist suicidal impulses for a long time by distracting himself or consciously addressing the so-called anti-suicidal thoughts (e.g. responsibilities towards the family, fear of death, religious prohibitions, etc.). By contrast, adolescents, due to personal immaturity, have these restraining mechanisms less strong. Therefore, in adolescence, the period preceding the commission of suicide is shorter. From this perspective, the interview survey in this study involves three groups of people and confirms the need to strengthen the prevention efforts of the entire teaching community and civil society.

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