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Azimova, Aygun Sulhiddin
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The study of relationship between adolescents' suicidal behavior and learning achievements

Aygun Sulhiddin Azimova 

Institute Education of the Republic of Azerbaijan, Baku, Azerbaijan

Abstract

The main focus of the article is on the study of relationship between teaching achievements and the manifestations of suicidal behavior – depression, aggression and anxiety. The study was conducted with 302 adolescents studying in Baku and Ganja. One of the main hypotheses of the study was the relationship between student achievement and depression, mental state and suicidal risk. It is believed that there is an inverse relationship between students' learning achievement and the three characteristics mentioned. That is, if these three features are at high level, it will negatively affect students' academic achievement and the students' academic achievement will be low. The study showed that there is a positive correlation between adolescents' learning activities, including their achievements, and suicidal behavior. The correlation coefficient between all three features is significant at 0.01. That is, in all three tables, $P = 0.000$, which indicates that the relationship is significant at the level of 0.01. We believe that it is possible to reduce this dependence by overcoming the depressive state and directing the mental state in a positive direction.

Keywords

Adolescents. Suicidal behavior. Learning achievements. Depressive state.

O estudo do relacionamento entre o comportamento suicida de adolescentes e as conquistas de aprendizagem

Resumo

O foco principal do texto é o estudo da relação entre as realizações do ensino e as manifestações do comportamento suicida – depressão, agressão e ansiedade. A pesquisa foi realizada com 302 adolescentes que estudam em Baku e Ganja. Uma das principais hipóteses da pesquisa foi a relação entre desempenho dos alunos e depressão, estado mental e risco de suicídio. Acredita-se que exista uma relação inversa entre o desempenho dos alunos e essas três características. Ou seja, se esses três recursos estiverem em alto nível, afetará negativamente o aprendizado dos discentes e o seu desempenho acadêmico será baixo. Mostrou-se que existe uma correlação positiva entre as atividades de aprendizagem dos adolescentes, incluindo suas realizações e comportamento suicida. O coeficiente de correlação entre os três recursos é significativo em 0,01. Isto é, nas três tabelas, $P = 0,000$, o que indica que o relacionamento é significativo no nível de 0,01. Acredita-se que é possível

reduzir essa dependência superando o estado depressivo e direcionando o estado mental em uma direção positiva.

Palavras-chave

Adolescentes. Comportamento suicida. Realizações de aprendizagem. Estado depressivo.

**El estudio de la relación entre los comportamientos suicidas
y los logros de aprendizaje**

Resumen

El objetivo principal del artículo es el estudio de la relación entre los logros de la enseñanza y las manifestaciones del comportamiento suicida: depresión, agresión y ansiedad. El estudio se realizó con 302 adolescentes que estudian en Bakú y Ganja. Una de las principales hipótesis del estudio fue la relación entre el rendimiento de los estudiantes y la depresión, el estado mental y el riesgo de suicidio. Se cree que existe una relación inversa entre el rendimiento de aprendizaje de los discentes y las tres características mencionadas. Es decir, si estas tres características están en un nivel alto, afectará negativamente el aprendizaje de los estudiantes y su rendimiento académico será bajo. El estudio mostró que existe una correlación positiva entre las actividades de aprendizaje de los adolescentes, incluidos sus logros y el comportamiento suicida. El coeficiente de correlación entre las tres características es significativo en 0.01. Es decir, en las tres tablas, $P = 0.000$, lo que indica que la relación es significativa al nivel de 0.01. Se cree que es posible reducir esta dependencia superando el estado depresivo y dirigiendo el estado mental en una dirección positiva.

Palabras clave

Adolescentes. Comportamiento suicida. Logros de aprendizaje. Estado depresivo.

1 Introduction

In modern times, against the background of global social and psychological problems, suicidal behavior occupies one of the leading positions. The problem lies not only in the growing dynamics of suicidal risks, but also in their unpredictability and difficulty in resolving them. Despite significant research on the problem, in some countries and the use of the necessary methods and techniques, the problem of suicide still remains one of the problematic issues. The number of suicides has been increasing in our republic for the last ten years, as well as all over the world. At the same time, suicides are more prevalent among adolescents and young people, which is an alarm

signal. There are various reasons for suicide in adolescents. However, misunderstanding with parents, teachers, and peers dominate among the reasons.

Mistakes, inappropriate remarks and reprimands in the training process leave deep traces in students and adolescents when they are at sensitive age and lay the groundwork for suicidal behavior in the future. In general, there are several factors that contribute to the study of psychopedagogical issues of suicidal behavior in adolescents.

First, people such as teachers, educators who engage in pedagogical activities, do not have the necessary knowledge about the adolescents' suicidal tendency and its features, and educational work in this sphere is insufficient.

Secondly, the symptoms that can lead to suicidal behavior in adolescents cannot be assessed by parents and environment. The deepening situation which occurs as a result of presenting depressive state as "meaningless", "non-permanent" state, eventually leads to such situations.

Thirdly, modern adolescents live in a dynamic society where social and psychological adaptation is enhanced. Against the background of depletion of adaptive energy, the constant use of social networks, the proliferation of videos promoting suicidal behavior lead to suicidal behavior in adolescents at a time when cognitive development is not yet complete and they are sensitive to perception.

Finally, it is important to emphasize the attitudes of teenagers towards school. Conflict with classmates, teachers' criticism, problems in training, the phenomenon of intra-group pressure, etc. damage the adolescents' immature psyche, and in this case the tendency to commit suicide increases. Recent events in our country indirectly confirm this. Along with all this, it should be noted that the psychophysiological processes that took place during adolescence, including the events that took place with adolescents, the fact that our lands are still in the hands of the Armenian occupiers, and other factors affect adolescents' psyche, which cause frustration, exacerbate depression, lead to despair, mood swings, and the result is unpredictable.

In addition, the formation of suicidal behavior is strongly influenced by the individual psychological characteristics of adolescents, as well as their emotional state. If these issues are not discovered in time, the risk of suicide among adolescents will increase and it will be difficult to educate citizens who are useful to society. From this

point of view, the topic is relevant for the modern period, and taking this into account, we considered it expedient to choose the problem as an object of research.

It should be noted that the term suicidal behavior and suicide was first introduced into scientific circulation by the French sociologist Durkheim (1994). According to Durkheim (1994), the word “suicide” is derived from a Latin word “suicidium”. It is the act of intentionally causing one’s own death. Of course, in the case of a completed suicide, this intention is very easy to determine, but very difficult to prove (DURKHEIM, 1994). “Suicide” is a Latin word derived from a combination of the words “sui” - oneself and “saedere” - to kill oneself. In our language, the word “suicide” is used instead of the word “intihar”. The word “intihar” is an Arabic word. Although it used in the meaning of “cutting one’s throat”, it is now included all methods of suicide. Therefore, both words have the same power and are used in our language in the sense of suicide (HUSEYNOVA, 2012).

The problem of suicide has always been in the focus of researchers. Due to the lack of systematic research in this area, there are many controversial points. Considering these points, we have focused more on research on suicide over the past 20 years. Cassels *et al.* (2018) claim that improving the family environment from the age of 14 can reduce the risk of suicide for adolescents. They believe that it is the family environment that contributes to suicidal behavior. Cardoso *et al.* (2018) in their study with 534 adolescents on the manifestations of depressive states and suicidal ideation leading to depression showed that direct and indirect factors cause suicide.

Ethnic and verbal threats in adolescents’ imagination lead to depression, which in turn leads to suicidal behavior. Indirect effects are formed on the basis of direct indifference, depression and suicidal thoughts (CARDOSO *et al.*, 2018). Researchers (IVARSSON; LARSSON; GILLBERG; HEDLEY *et al.*, 2018; MARIS, 2002) show that new nine percent of adolescents recover from depression, and 36 percent remain suicidal.

A number of researchers (FREDRICK *et al.*, 2018) have attempted to find a link between depression and suicidal thinking. It became clear that social support from friends is more important for girls and keeps them away from suicidal thoughts. A number of researchers in their study on tendency of suicidal behaviour according to clinical feature of 134 adolescents between the ages of 13 and 15, come to conclusion that sex and age

are associated with a higher risk of suicide, and there is a significant relationship between them (BALAZS *et al.*, 2018).

Freud interprets the psychological nature of suicidal behavior in his own work "Mourning and Melancholy". In this book, Freud discusses the important role of the instinct of "self-destruction" in mental life, based on various clinical experiences. He writes: "Self-destruction is not a rare occurrence, and to a certain extent this tendency is seen in more people rather than in those who carry it out. Accordingly, self-destruction is formed by a compromise between these instincts and the opposing forces (LITMAN, 2003).

In case of suicide, suicidal tendencies appear unconsciously, weakly, and in compressed tendencies long before these ideas have emerged. Even if there is a conscious intention to commit suicide, it does not materialize immediately, time is chosen, methods and possibilities are considered. However, the unconscious intention is not realized until the appearance of factors that deepen it, and the facts that act as a cause (LITMAN, 2003).

There are various approaches in American behavioral psychology that try to explain the psychological mechanisms of suicide. One of them is U. Glasser's approach. According to him, the causes of suicidal behavior are associated with depression, and the loss of self-control prepares the ground for this act. He shows that the only behavior that a person can control is his own behavior. Reality only gives us information, and it is our own choice to adapt that information to internal needs.

Well-known psychologist Thomas Joiner believes that "those who have learned to pass the instinct of self-preservation are ready to commit suicide". Somehow they can break his resistance. Potentially suicidal people prepare themselves for this process, get used to the feelings of pain, develop immunity to this or that psychological condition, which does not pose a problem for them in the subsequent occurrence of suicide (BALAZS *et al.*, 2018).

Canadian Ferroo's (2017) study found that suicidal thoughts, plans, and suicide attempts are higher in people with chronic illnesses than in others, and there is a significant correlation between them ($P < 0.01$). After correction of chronic disease tendency to suicidal movements [OR = 1.28 (1.01 - 1.64), plans [OR = 2.34 (1.22-4.93)] and attempts [OR = 4.63 (1 , From 52 to 14.34) became to reduce. The presence or

absence of learning-related mood disorders is higher in adolescents and young people with chronic illness than in others [OR = 1.89 (1.06-5, 28)].

Serious research on suicidal behavior has also been conducted in the Republic of Azerbaijan. In these studies, adolescence was studied and suicides were touched upon in this context. In particular, Ayyubova's dissertation *Psychological features of the formation of suicidal behavior*, Mammadov's article "Depression is on the verge of suicide", Salmangizi's "What is a preventable cause of death or ways to commit suicide?" and other research papers study the causes and psychological mechanisms of suicidal behavior.

In addition to all these, there are enough fundamental studies that try to show the methodological basis of suicidal behavior. It should be noted that these researchers have tried to create a methodological basis for suicidal behavior, which acts as the leading line of modern research. However, in many cases, the time and space criteria of these studies were different and couldn't fully reveal the psychological mechanisms of suicidal behavior. Emergence of new causes and increasing dynamics of suicidal situations once again show the urgency of the problem.

The facts show that people with suicidal thoughts, plans and attempts always have chords of sadness and despair, and in their opinion, there is no other way out. But at the same time, there are various forms of behavior that can lead to suicidal tendencies. Often such signals come from inside. The most important thing is to be able to understand the signals and behaviors of these people in a timely manner and to be able to help them. Of course, it is possible to prevent tragedies and ensure human survival by taking certain measures and helping them.

2 Methodology

To carry out the experimental-practical direction of the research, Beck's "Depression" (BECK; STEER; GARBIN, 1988), "Suicidal risk map" methods were used. The study was conducted on adolescents studying in Baku and Ganja. 302 teenagers took part in the survey.

3 Results and discussion

The experiment examined whether there was a difference in three main variables, namely, “Becky’s depression scale”, “Mental condition” (anxiety, frustration, aggression, rigidity), and the “Suicidal risk map”. As a result of the inspection, almost no significant differences were observed between the two groups.

Table 1 – Indicators of differences on experimental and control groups

Group statistics					
	Group	N	Numerical average	Std. deviation	Std. error
Becky’s depression scale	Control	160	1.87	1.065	.083
	Experimental	160	1.88	1.029	.088
Mental condition	Control	160	6.22	1.570	.121
	Experimental	160	6.10	1.708	.146
Suicide risk map	Control	160	1.29	.573	.044
	Experimental	160	1.28	.580	.050

Source: Own elaboration (2020).

The difference between the two independent groups is given in the Sig (2-tailed) column in table 3.5, and as can be seen, there was no $P \leq 0.05$ on any variable. So the difference between the groups at 0.05 is not significant. As we know, when it is $P \leq 0.05$, the claim that the intergroup difference is significant at 0.05 is confirmed. However, it cannot be said that the difference between the two groups is serious and statistically significant. In our example, “Becky’s depression scale” is $p = 0.951$, “Mental Change” is $p = 0.210$, “Suicidal risk map” is $p = 0.884$.

Table 2 – Statistical indicator of differences between experimental and control groups

T. test of independent groups									
Becky’s depression scale	Levene test for equality of variation		T-test for the equality of the numerical mean						
	F	Sig.	t	df	Sig. (2-two-sided)	Numerical average difference	Std. error difference	95% reliability factor of the difference	
								Low	High
	0.648	0.422	-0.062	318	0.951	-0.001	0.121	-0.246	0.231
Mental condition	2.356	0.126	1.257	318	0.210	0.120	0.189	-0.134	0.609
Suicide risk map	0.022	0.882	0.146	318	0.884	0.010	0.067	-0.121	0.141

Source: Own elaboration (2020).

Research showed that there is an inverse relationship between learning achievement and levels of depression, anxiety, aggression, rigidity, frustration, and suicidal risk. The correlation factor between educational achievement on all three traits is significant at 0.01. That is, in all three tables, $P = 0.000$, which indicates that the relationship is significant at the level of 0.01. Since the “Pearson correlation” for all three variables is negative, it can be said that there is an inverse relationship between these variables and educational achievement.

Table 3 – Indicators of addiction between educational achievements and depressive status

Indicators		Educational achievements	Depressive indicators
Educational achievements	Pierson correlation	1	-0.698**
	Sig. (2-tailed)		0.000
	N	302	302
Depressive indicators	Pierson correlation	-0.698**	1
	Sig. (2-tailed)	0.000	
	N	302	302

Note: **. The correlation is significant at the level of 0.01 (2-tailed).

Source: Own elaboration (2020).

As can be seen from Table 3.2.3, there is an inverse relationship between students' learning achievements and depression, that is, $p = 0.000$, $r = -0.698$. This proves the assertion of the hypothesis. The more the depression is, the less the learning achievement is.

Table 4 – Indicators of relationship between students' mental state and learning achievements

Indicators		Educational achievements	Mental condition
Educational achievements	Pearson Correlation	1	-0.671**
	Sig. (2-tailed)		0.000
	N	302	302
Mental condition	Pearson Correlation	-0.671**	1
	Sig. (2-tailed)	0.000	
	N	302	302

Note: **. The correlation is significant at the level of 0.01 (2-tailed).

Source: Own elaboration (2020).

As can be seen from Table 4, there is an inverse relationship between students' learning achievements and mental state, that is, $p = 0.000$, $r = -0.671$. When the indicators of mental state are inadequate, the level of students' learning achievements decreases.

Table 5 – Indicators of the relationship between the mental state of students and learning achievements

Indicators		Educational achievements	Suicide risk factor
Educational achievements	Pearson Correlation	1	-0.721**
	Sig. (2-tailed)		0.000
	N	302	302
Suicide risk factor	Pearson Correlation	-0.721**	1
	Sig. (2-tailed)	0.000	
	N	302	302

Note: **. The correlation is significant at the level of 0.01 (2-tailed).

Source: Own elaboration (2020).

As can be seen from table 5, any fail in students' educational achievements increases their risk factor of suicide, that is, $p = 0.000$, $r = -0.721$.

Table 6 – Indicators of the difference in depressive status in two groups

	Becky's depression scale					Total
	0-9 absence of depressive symptoms	10-15 Minimal depression	16-19 Mild depression	20-29 Moderate depression	30-63 Severe depression	
Control	60	49	27	14	4	154
Experimental	84	41	10	11	2	148
Total	144	90	37	25	6	302

Source: Own elaboration (2020).

Table 6 shows that the levels of depression decreased in the experimental group compared to the control group. As a result of this comparison, it can be said that educational and counseling work lowers the depressive background and indirectly reduces the risk of suicide. Research has shown that there is indeed an inverse relationship between learning achievement and levels of depression, anxiety, aggression, rigidity, frustration, and suicide risk. The correlation coefficient between educational achievement on all three factors is significant at 0.01. That is, in all three tables, $P = 0.000$, which indicates that the relationship is significant at the level of 0.01. Since the "Pierson correlation" for all three variables is negative, it can be said that there is an inverse relationship between these variables and educational achievement.

5 Final considerations

Research has shown that there is indeed a correlation between learning achievement and levels of depression, anxiety, aggression, rigidity, frustration and

suicidal risk. The correlation coefficient between educational achievement on all three traits is significant at 0.01. Research has shown that suicide attempts in adolescents can occur in cases of high levels of depression, aggression and anxiety. Thus, suicidal behavior in adolescents is associated with a depressive state, including aggression and frustration. Boys are more prone to suicide than girls due to sexual factors. Based on our research, it can be argued that it is possible to prevent suicidal behavior in adolescents by reducing anxiety, aggression, including frustration. This factor must be taken into account by parents and teachers. Psychologically, every person falls into certain difficult situations in life, from which he can not find a way out. As a result of external influences a person is unable to cope with the obstacles he faces. At this time, he feels unbearable psychological and moral pain, despair, and can not successfully overcome the conflict. He can see no other way out of this situation. The reasons are different: loss of a loved one, divorce, loss of job, sexual violence, regular physical violence, blackmail, debt, loss of a great position, intimidation, nervous breakdown, loneliness, deep depression, imitation of an idol, etc. These facts must be taken into account in the process of upbringing.

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Aygun Sulhiddin Azimova, Institute Education of the Republic of Azerbaijan, Department Psychology and Age Physiology

 <https://orcid.org/0000-0001-9984-362X>

Candidate for a degree at the Department “Psychology and Age Physiology” at the Institute Education of the Azerbaijan Republic, Baku. Khatai, Azerbaijan.

Authorship contribution: Developed all writing, collection and analysis of data and results.

E-mail: aygun.azimova@mail.ru

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