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ANALYSIS OF SOCIO-PSYCHOLOGICAL FACTORS ASSOCIATED WITH SUICIDAL BEHAVIOR IN PERSONS OF MILITARY AGE

Abstract. Currently, the Armed Forces are facing the problem of the death of personnel who committed suicide, which makes it important to look for the reasons of suicidal behavior.

The study involved 169 men, divided into two groups: the first group consisted of persons of military age, in the amount of 115 people and the second group included 54 people who committed parasuicide using highly lethal methods of self-harm (GLIVS). During the study, socio-demographic characteristics (age, marital status, living conditions, professional status, characteristics and conditions of upbringing) and individual psychological personality traits (type of temperament, introversion-extraversion, neuroticism, ostentatiousness, fixedness, formalism, excitability, hyperthymia, dysthymia, anxiety, exaltation, affectability, cyclothymia) were assessed. The calculations were performed using the statistical package IBM SPSS Statistics 22.

Statistically significant differences between the study groups were due to the presence of differences between persons brought up in two-parent families. These groups differed in the phlegmatic type of temperament (predominant in GLIVS), the character traits of excitability, dysthymia, and hyperthymia. For GLIVS brought up in two-parent families, in addition to the phlegmatic type of temperament, it was characterized by the presence of punishments in childhood, a lower level of education (secondary education prevailed), a lower level of neuroticism, excitability, dysthymia and anxiety, an average level of hyperthymicity.

Statistically significant differences between the study groups were revealed in terms of the type of temperament, excitability, dysthymism, and hypotensiveness and were due to the presence of differences between persons brought up in full families.

Individuals from full families of GLIVS are characterized by the presence of more frequent punishments in childhood, a phlegmatic type of temperament, a lower level of education, a lower level of neuroticism, excitability, dysthymia, anxiety.

Keywords: suicide, full family, single-parent family, temperament, personality traits

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АНАЛИЗ СОЦИАЛЬНО-ПСИХОЛОГИЧЕСКИХ ФАКТОРОВ, СОПРЯЖЕННЫХ С СУИЦИДАЛЬНЫМ ПОВЕДЕНИЕМ ЛИЦ ПРИЗЫВНОГО ВОЗРАСТА

Аннотация. В настоящее время достаточно остро стоит проблема гибели личного состава в Вооруженных Силах. одной из причин которой является суицид. Это делает актуальным поиск причин и факторов, обуславливающих суицидальное поведение.

В исследовании приняли участие 169 мужчин, разделенных на две группы: первая группа состояла из 115 лиц призывного возраста, вторая – из 54 человек, совершивших парасуицид с использованием высокотетальных способов самоповреждения (далее – ГЛИВС). При проведении исследования оценивали социально-демографические

характеристики (возраст, семейный статус, условия проживания, профессиональный статус, особенности и условия воспитания) и индивидуально-психологические черты личности (тип темперамента, интроверсия-экстраверсия, нейротизм, демонстративность, застревание, педантичность, возбудимость, гипертимность, дистимность, тревожность, экзальтированность, эмотивность, циклотимность). Расчеты проводили с использованием статистического пакета программ IBM SPSS Statistics 22.

Статистически значимые различия между исследуемыми группами были обусловлены наличием различий между лицами, воспитанными в полных семьях. Обследуемые данных групп различались по флегматическому типу темперамента (преобладал в ГЛИВС) и чертам характера (возбудимость, дистимичность и гипертимность). Для лиц из группы ГЛИВС, воспитанных в полных семьях, кроме флегматического типа темперамента было характерно наличие наказаний в детстве, более низкие уровни образования (преобладало среднее), нейротизма, возбудимости, дистимности и тревожности, средний уровень гипертимности.

Статистически значимые различия между обследуемыми выявлены по таким показателям, как тип темперамента, возбудимость, дистимность и гипертимность, и были обусловлены наличием различий между лицами, воспитанными в полных семьях.

Для лиц из полной семьи группы ГЛИВС характерно наличие более частых наказаний в детстве, флегматический тип темперамента, более низкий уровень образования, более низкий уровень нейротизма, возбудимости, дистимичности и тревожности.

Ключевые слова: суицид, полная семья, неполная семья, темперамент, черты характера

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Introduction. Loss of military personnel in the Armed Forces is currently very urgent. One of the reasons for this is suicide. More than 80 % of suicides in the army are committed by members of the armed forces and those who do military service on conscription, including 2/3 of first-year soldiers [1], that requires careful study.

Objects and research methods. The study involved 169 men, divided into two groups: the first group consisted of people of military age and consisted of 115 people (GMA), the second group included persons who had suicidal attempt with high probability of death (mainly hanging) (GSAD) and consisted of 54 people. At the time of the examination they were undergoing treatment at the State Institution “Republican Research and Practice Mental Health Center”, Minsk, Republic of Belarus.

Therefore one of the main variables was whether the sample subject belonged to one of these groups. Other variables in the sample were socio-demographic characteristics (age, marital status, living conditions, occupational status, characteristics and conditions of upbringing) and Eysenck Personality Questionnaire and the Leonhard–Schmischek test (type of temperament, introversion-extraversion, neuroticism, ostentatiousness, fixedness, formalism, excitability, hyperthymia, dysthymia, anxiety, exaltation, affectability, cyclothymia). The respondents who, at the time of the examination, had an Eysenck Lie Scale score of 5 or higher were excluded from the survey.

In the analysis, some of the nominal variables were reduced to a dichotomous form. Thus, the features of child-rearing with the values “full family”, “single-parent family”, and “orphan” are reduced to a variable with two values: “full family” and “single-parent family, orphan”. Child-rearing features with the values “were not punished”, “rarely punished”, “often punished”, are mainly reflected by the variable with the values “were not punished”, “were punished”.

The results of the Leonhard-Schmischek Test are measured on a point ordinal scale and range from 0 to 24. The following grouping was used for them: 0–12 – type of accentuation is not expressed, 13–18 – tendency to one or another type of accentuation, 19–24 – severity of type of accentuation. The grouping intervals were ordinal variables.

The hypothesis of a statistical relationship between the variables was tested using the χ^2 test at the standard significance level of $p \leq 0.05$. The effect size (strength of relationship) was estimated using Cramer coefficient for nominal variables (also recommended for estimating the strength of relationship between nominal and ordinal variables [2]) and Goodman–Kruskal γ -coefficient for ordinal variables [3]). When the permissible level of significance is exceeded ($p > 0.05$), the value of the Cramer coefficient and γ -coefficient was not indicated in the Table.

Since the analysis involved dichotomous variables that under certain approach can be classified as both nominal and ordinal, the values of both coefficients were given for comparison in all cases.

Assuming that the distances between scale gradations are perceived equally, the Leongard–Schmischek test scores can be considered quasi-interval, or quasi-quantitative variables. In this case, the difference is defined on the scale (as on the scale of interval), and arithmetic operations are applicable to it, in particular, the calculation of the arithmetic mean and variance [2]. With this in mind, when significant differences were found between distributions of grouping intervals, the means observations of the corresponding quasi-quantitative variables were also compared, giving greater clarity to the results. To compare the means we used Student's *t*-test, which is considered robust (stable) to deviations of the initial data distributions from normal distribution even for small samples (about 30), which was almost always performed in our study. The calculations were performed using the statistical package IBM SPSS Statistics 22.

The aim of the study is to establish a link between belonging to a group and socio-psychological factors.

Results and its discussion. As Tab. 1 shows, the age of the participants in the study groups differed significantly.

Table 1. Age distribution in the study groups

Indicator	GMA*		GSAD	
	under 21 years (<i>n</i> = 52)	21 years or older (<i>n</i> = 52)	under 40 years (<i>n</i> = 28)	40 years or older (<i>n</i> = 26)
Age, years	19	22	30	54
Average age	21		42	

* 11 people had no data on age.

Differences in age seem to have led to differences between the groups in family status and living conditions (Tab. 2, 3).

Table 2. Distribution of the study groups depending on the marital status

Marital status	GMA (<i>n</i> = 115)	GSAD (<i>n</i> = 54)
Quantity		
Married	4.3 %	38.9 %
Single	89.6 %	35.2 %
Civil marriage	6.1 %	7.4 %
Divorced		13.0 %
Widower		5.5 %

Table 3. Distribution of the study groups depending on the living conditions

Living conditions	GMA (<i>n</i> = 114)	GSAD (<i>n</i> = 54)
With a family	4.4 %	35.2 %
Alone	14.0 %	35.2 %
With a partner	6.1 %	13.0 %
With parents	74.6 %	14.8 %
Other	0.9 %	1.8 %

In GSAD, where the average age was 42, more than a third of the men (35.3 %) were single and an equal number (35.2 %) lived alone. In GMA, where the average age was 21, unmarried people prevailed, who mostly lived with their parents (74.65 %). However, these differences did not reflect real differences between the groups studied because the age of 21 is the beginning of a life journey, which is further associated with the formation of a family and changes in living conditions.

At the beginning of the study the relationship between belonging to the study group and the characteristics of child-rearing (growing up either in a two-parent family or in a single-parent family) was tested, which is reflected in Tab. 4, 5.

Table 4. Child-rearing features depending on the study groups

Child-rearing features	GMA (n = 109)	GSAD (n = 53)
Two-parent family	68.8 %	64.2 %
Single-parent family, orphan	31.2 %	35.8 %
<i>p</i>	0.553	

Note. *p* – level of significance achieved.

Table 5. Study groups and the child-rearing features

Child-rearing features	Two-parent family (n = 109)	Single-parent family, orphan (n = 53)
GMA	68.8 %	64.2 %
GSAD	31.2 %	35.8 %
<i>p</i>	0.553	

GMA and GSAD group percentages and two-parent families and single-parent families group percentages in family sample coincided and were 67.3 and 32.7 %, respectively. Tab. 4 follows that in both groups the number of individuals raised in two-parent families was greater than in single-parent families; the distributions were almost indistinguishable and to the ratio of the shares of two-parent and single-parent families in the sample.

The absence of a significant relation between child-rearing conditions and group membership allowed statistical analysis to be performed not only according to the study group membership, but also according to the child-rearing conditions. Nowadays not being raised in a two-parent family is considered to be one of the factors responsible for the development of a variety of mental disorders (psychoactive substances abuse, schizophrenia, depression) among adults including the formation of suicidal behavior. The further analysis of the variables is performed as follows:

1) for the entire sample and for each study group (GMA, GSAD) the connection between the variable being studied and child-rearing conditions is checked (growing up in a two-parent or single-parent family);

2) for the entire sample and each child-rearing conditions its relation to the study group was tested.

No statistically significant differences could be found in assessing the presence of a connection between the child-rearing features (presence or absence of parental punishment and its severity) and group membership. It can only be noted that those who were punished in single-parent families dominated, regardless of their study group membership (Tab. 6).

Table 6. Child-rearing features depending on the child-rearing conditions and the study groups

Child-rearing features	The entire sample		Two-parent family		Single-parent family	
	GMA (n = 115)	GSAD (n = 54)	GMA (n = 75)	GSAD (n = 34)	GMA (n = 34)	GSAD (n = 19)
Were not punished	49.6 %*	20.4 %*	53.3 %*	23.5 %*	38.2 %	15.8 %
Were punished	50.4 %*	79.6 %*	46.7 %*	76.5 %*	61.8 %	84.2 %
<i>p</i>	0.000		0.004		0.088	
Cramer's coefficient	0.278		0.278			
γ -coefficient	0.587		0.576			

*Significance at the $p \leq 0.05$ level. The same in Tab. 7, 10–18.

A statistically significant connection of child-rearing conditions to a group membership was found only for those from two-parent families (Tab. 6). In the GMA group, the proportion of those raised in two-parent families who were not punished was more than half (53.3 %), in the GSAD it was 23.5 %. Thus, in contrast to GMA, persons from two-parent families in GSAD have the “punishment in childhood” factor. When comparing the groups on the indicator “level of education”, statistically significant differences were found depending on the child-rearing conditions, taking into account the factor

of group membership (Tab. 7). Among those raised in a single-parent family, individuals with secondary and secondary professional education predominated in the GMA group, in contrast to those raised in two-parent families. On this basis, it can be assumed that being raised in a single-parent family encourages young people to enter the profession early.

Table 7. Education level depending on the child-rearing conditions and the study groups

Education	The entire sample		Two-parent family		Single-parent family	
	GMA (<i>n</i> = 115)	GSAD (<i>n</i> = 54)	GMA (<i>n</i> = 69)	GSAD (<i>n</i> = 34)	GMA (<i>n</i> = 31)	GSAD (<i>n</i> = 19)
Higher	35.2 %*	16.7 %*	39.1 %*	14.7 %*	32.3 %	21.1 %
Secondary professional	44.8 %	42.6 %	36.2 %	41.2 %	58.1 %	47.4 %
Secondary	9.5 %*	31.5 %*	13.0 %*	38.2 %*	3.2 %	21.1 %
Incomplete higher	10.5 %	5.6 %	11.6 %	2.9 %	6.5 %	5.3 %
Incomplete secondary		3.7 %		2.9 %		5.3 %
<i>p</i>	0.001		0.004		0.186	
Cramer's coefficient	0.348		0.385			
γ -coefficient	0.163		0.305			

For those who grew up in a two-parent family, there was a statistically significant relation between the level of education and group membership, which manifested itself in the following patterns:

1. The proportion of persons with higher education in the GMA group is higher than in the GSAD group (39.1 % vs 14.7 %), despite differences in age. It can be increased by another 11.6 % due to the transition to it individuals from the category of incomplete higher education.

2. Only a small number of persons in the PCA group had a secondary education (13.0 %), and the proportion of these persons may be decreasing in the future. In GSAD more than one-third had no professional education (38.2 %). A change in the educational status of these individuals is unlikely in the future. Thus, the level of education was higher among GMA s raised in a two-parent family, despite marked age differences between the study groups. In assessing professional status only a few patterns emerged. They depend on child-rearing conditions (Tab. 8).

Table 8. Professional status depending on the child-rearing conditions and the study groups

Professional status	The entire sample		Two-parent family		Single-parent family	
	GMA B (<i>n</i> = 112)	GSAD (<i>n</i> = 54)	GMA (<i>n</i> = 74)	GSAD (<i>n</i> = 34)	GMA (<i>n</i> = 32)	GSAD (<i>n</i> = 19)
Those who work	73.2 %	64.8 %	77.0 %	58.8 %	68.8 %	73.7 %
Those who do not work	18.8 %	31.5 %	17.6 %	35.3 %	18.8 %	26.3 %
Pupils, students, retired	8.0 %	3.7 %	5.4 %	5.9 %	12.5 %	
<i>p</i>	0.137		0.119		0.255	
Cramer's coefficient						
γ -coefficient						

The majority of the participants worked despite marked age differences between the groups. However, the most significant connection (the achieved significance level of 0.119) was between the professional status and group membership for those who grew up in a two-parent family. In this category, the percentage of non-workers in the GMA group was 17.6 % and in the suicide group 35.3 %.

Examining the relationship of the temperament type with the other two variables statistically significant differences were obtained between the groups under study, and between the child-rearing conditions (Tab. 9, 10).

It was found that a phlegmatic type of temperament predominated among those who were born and raised in two-parent families in this group (60.7 %). The predominant type of temperament in the PCA group was melancholic regardless of child-rearing conditions.

Table 9. Temperament type depending on the group membership and the child-rearing conditions

Temperament type	The entire sample		GMA		GSAD	
	Two-parent family (n = 100)	Single-parent family (n = 51)	Two-parent family (n = 72)	Single-parent family (n = 33)	Two-parent family (n = 28)	Single-parent family (n = 18)
Melancholic	56.0 %	51.0 %	65.3 %	54.5 %	32.1 %	44.4 %
Sanguine	4.0 %	5.9 %	5.6 %	3.0 %		11.1 %
Phlegmatic	27.0 %	23.5 %	13.9 %	27.3 %	60.7 %*	16.7 %*
Choleric	13.0 %	19.6 %	15.3 %	15.2 %	7.1 %	27.8 %
<i>p</i>	0.673		0.397		0.009	
Cramer's coefficient					0.500	
γ -coefficient					0.057	

Table 10. Temperament type depending on the child-rearing conditions and the group membership

Temperament type	The entire sample		Two-parent family		Single-parent family	
	GMA (n = 110)	GSAD (n = 47)	GMA (n = 72)	GSAD (n = 28)	GMA (n = 33)	GSAD (n = 18)
Melancholic	63.6 %*	38.3 %*	65.3 %*	32.1 %*	54.5 %	44.4 %
Sanguine	4.5 %	4.3 %	5.6 %		3.0 %	11.1 %
Phlegmatic	17.3 %*	42.6 %*	13.9 %*	60.7 %*	27.3 %	16.7 %
Choleric	14.5 %	14.9 %	15.3 %	7.1 %	15.2 %	27.8 %
<i>p</i>	0.007		0.000		0.387	
Cramer's coefficient	0.279		0.479			
γ -coefficient	0.349		0.412			

As Tab. 10 shows, there were differences between the groups in terms of type of temperament only among people from two-parent families. The proportion of the melancholics in the GMA group was significantly greater than in the GSAD group (65.3 and 32.1 %, respectively), and the proportion of the phlegmatics in the IULMS group was greater (60.7 % vs 13.9 %).

When studying the indicator “neuroticism”, certain correlations were established depending on child-rearing conditions (Tab. 11).

Table 11. “Neuroticism” indicator depending on the child-rearing conditions and the study groups

“Neuroticism indicator”	The entire sample		Two-parent family		Single-parent family	
	GMA (n = 111)	GSAD (n = 47)	GMA (n = 73)	GSAD (n = 28)	GMA (n = 33)	GSAD (n = 18)
0–12	21.6 %*	40.4 %*	19.2 %*	53.6 %*	30.3 %	22.2 %
13–18	38.7 %	38.3 %	39.7 %	28.6 %	36.4 %	50.0 %
19–24	39.6 %*	21.3 %*	41.1 %*	17.9 %*	33.3 %	27.8 %
Mean value	16.0*	14.0*	16.0*	12.5*	15.4	16.1
<i>p</i>	0.023		0.002		0.632	
Cramer's coefficient	0.219		0.347			
γ -coefficient	0.379		0.550			

Among those raised in the GSAD a two-parent family, the index of “neuroticism” was lower than in the PCA group, which agrees with the ratio of the phlegmatics in the GSAD and GMA raised in a two-parent family (60.7 and 13.9 %, respectively) (Tab. 12, 13).

In GSAD, individuals raised in a two-parent family had a lower level of “excitability” than those raised in a single-parent family (Tab. 12).

Among those raised in a two-parent GSAD family, the “excitability” level was lower than in the GMA group. The significance of this relationship determines the significance of the differences across the sample as a whole.

Table 12. “Excitability” indicator depending on the group membership and the child-rearing conditions

“Excitability” indicator	The entire sample		GMA		GSAD	
	Two-parent family (n = 100)	Single-parent family (n = 52)	Two-parent family (n = 73)	Single-parent family (n = 33)	Two-parent family (n = 27)	Single-parent family (n = 18)
0–12	55.0 %	42.3 %	46.6 %	38.2 %	77.8 %	50.0 %
13–18	26.0 %	32.7 %	28.8 %	38.2 %	18.5 %	22.2 %
19–24	19.0 %	25.0 %	24.7 %	23.5 %	3.7 %*	27.8 %*
Mean value	13.1	13.8	14.4	13.9	9.4*	13.7*
<i>p</i>	0.330		0.596		0.049	
Cramer’s coefficient					0.366	
γ -coefficient					0.356	

Table 13. Expression of “excitability” indicator depending on the upbringing features and the study groups

“Excitability” indicator	The entire sample		Two-parent family		Single-parent family	
	GMA (n = 112)	GSAD (n = 46)	GMA (n = 73)	GSAD (n = 27)	GMA (n = 34)	GSAD (n = 18)
0–12	43.8 %*	67.4 %*	46.6 %*	77.8 %*	38.2 %	50.0 %
13–18	31.3 %	19.6 %	28.8 %	18.5 %	38.2 %	22.2 %
19–24	25.0 %	13.0 %	24.7 %*	3.7 %*	23.5 %	27.8 %
Mean value	14.3*	11.2*	14.4*	9.4*	13.9	13.7
<i>p</i>	0.025		0.012		0.498	
Cramer’s coefficient	0.216		0.297			
γ -coefficient	0.400		0.603			

When comparing the groups in terms of “ostentatiousness” significant differences were also obtained depending on the child-rearing conditions (Tab. 14). The GMA group scored lower “ostentatiousness” indicator than the GSAD group regardless of the child-rearing conditions.

Table 14. “Ostentatiousness” indicator depending on the child-rearing conditions

“Ostentatiousness” indicator	The entire sample		Two-parent family		Single-parent family	
	GMA (n = 112)	GSAD (n = 46)	GMA (n = 73)	GSAD (n = 27)	GMA (n = 34)	GSAD (n = 18)
0–12	83.9 %*	60.9 %*	83.6 %*	51.9 %*	85.3 %	72.2 %
13–18	13.4 %*	32.6 %*	13.7 %*	40.7 %*	11.8 %	22.2 %
19–24	2.7 %	6.5 %	2.7 %	7.4 %	2.9 %	5.6 %
Mean value	9.6*	11.8*	9.4*	12.2*	9.8	11.3
<i>p</i>	0.007		0.005		0.523	
Cramer’s coefficient	0.250		0.325			
γ -coefficient	0.520		0.621			

The proportion of individuals with low ostentatiousness in GMA scores (0–12) high for both two-parent and single-parent families, which determined the low mean value of the ostentatiousness score for the individuals in this group. The significance of differences with GSAD in the two-parent family category determined the statistical significance of differences across the sample as a whole.

Statistically significant differences on the indicator “hyperthymia” were found between the groups when taking into account the factor of child-rearing conditions (Tab. 15).

Among those raised in a two-parent family, there was a statistically significant prevalence of individuals with a lower level of hyperthymia in the GMA, in GSAD with a medium level of hyperthymia. The significance of the association between those from two-parent families also determined the significance across the sample

On the “dysthymia” indicator, a statistically significant difference was obtained depending on child-rearing conditions (Tab. 16, 17).

Table 15. “Hyperthymia” indicator depending on child-rearing conditions

“Hyperthymia” indicator	The entire sample		Two-parent family		Single-parent family	
	GMA (<i>n</i> = 112)	GSAD (<i>n</i> = 46)	GMA (<i>n</i> = 73)	GSAD (<i>n</i> = 27)	GMA (<i>n</i> = 34)	GSAD (<i>n</i> = 18)
0–12	69.6 %*	47.8 %*	72.6 %*	44.4 %*	61.8 %	50.0 %
13–18	18.8 %	30.4 %	17.8 %	25.9 %	23.5 %	38.9 %
19–24	11.6 %	21.7 %	9.6 %*	29.6 %*	14.7 %	11.1 %
Mean value	10.0*	13.6*	9.6*	14.0*	11.1	13.2
<i>p</i>	0.034		0.016		0.507	
Cramer’s coefficient	0.207		0.289			
γ -coefficient	0.382		0.513			

Table 16. “Dysthymia” indicator depending on the group membership and the child-rearing conditions

“Dysthymia” indicator	The entire sample		GMA		GSAD	
	Two-parent family (<i>n</i> = 100)	Single-parent family (<i>n</i> = 52)	Two-parent family (<i>n</i> = 73)	Single-parent family (<i>n</i> = 34)	Two-parent family (<i>n</i> = 27)	Single-parent family (<i>n</i> = 18)
0–12	56.0 %	57.7 %	49.3 %	52.9 %	74.1 %	66.7 %
13–18	28.0 %	25.0 %	28.8 %	32.4 %	25.9 %	11.1 %
19–24	16.0 %	17.3 %	21.9 %	14.7 %	0.0 %*	22.2 %*
Mean value	13.1	13.5	13.9	13.7	11.0	13.2
<i>p</i>	0.920		0.679		0.026	
Cramer’s coefficient					0.402	
γ -coefficient					0.476	

As Tab. 16 shows, high level of dysthymia in GSAD (19–24) is significantly more common among people from single-parent families than among those raised in two-parent families. The severity of “dysthymia” was lower for GSAD compared to GMA among those who were born and raised in two-parent families (Tab. 17).

Table 17. “Dysthymia” indicator depending on the child-rearing conditions

“Dysthymia” indicator	The entire sample		Two-parent family		Single-parent family	
	GMA (<i>n</i> = 112)	GSAD (<i>n</i> = 46)	GMA (<i>n</i> = 73)	GSAD (<i>n</i> = 27)	GMA (<i>n</i> = 34)	GSAD (<i>n</i> = 18)
0–12	50.0 %*	69.6 %*	49.3 %*	74.1 %*	52.9 %	66.7 %
13–18	29.5 %	21.7 %	28.8 %	25.9 %	32.4 %	11.1 %
19–24	20.5 %	8.7 %	21.9 %		14.7 %	22.2 %
Mean value	13.8	11.9	13.9*	11.0*	13.7	13.2
<i>p</i>	0.060		0.017		0.235	
Cramer’s coefficient	0.189		0.285			
γ -coefficient	0.376		0.543			

When assessing the “anxiety” indicator statistically significant differences depended on child-rearing conditions (Tab. 18).

Those raised in a two-parent family scored lower level of anxiety in the GSAD group than in the GMA group.

Results and discussion: statistically significant differences between the groups were mainly due to the presence of differences between individuals raised in two-parent families. These groups differed in phlegmatic type of temperament (prevailed in GSAD), character traits “excitability”, “dysthymia” and “hyperthymia”. The “excitability” and “dysthymia” indicators scored lower in the GSAD, and “hyperthymia” was average, in contrast to the GMA group where this indicator scored low and among whom

melancholics predominated. The low indicators of “excitability” and “dysthymia” for phlegmatic individuals showed low mobility of mental processes and experiences, and could be responsible for difficulties in adaptive reactions and raise difficulties in solving current problems in life, thus causing the formation of suicidal behavior.

Statistical analysis revealed that it was typical for GSAD individuals raised in two-parent families, in addition to the phlegmatic type of temperament, be punished in childhood, have a lower level of education (secondary education predominated). They scored lower “neuroticism”, “excitability”, “dysthymia” and “anxiety”. The “hyperthermia” indicator was average.

Table 18. Expression of “anxiety” indicator and depending on the upbringing characteristics and the study group

“Anxiety” indicator	The entire sample		Two-parent family		Single -parent family	
	GMA (<i>n</i> = 112)	GSAD (<i>n</i> = 46)	GMA (<i>n</i> = 73)	GSAD (<i>n</i> = 27)	GMA (<i>n</i> = 34)	GSAD (<i>n</i> = 18)
0–12	58.0 %	76.1 %	54.8 %*	81.5 %*	64.7 %	66.7 %
13–18	30.4 %	17.4 %	32.9 %	14.8 %	29.4 %	22.2 %
19–24	11.6 %	6.5 %	12.3 %	3.7 %	5.9 %	11.1 %
Mean value	11.7	9.7	12.3*	8.7*	10.5	11.0
<i>p</i>	0.102		0.049		0.722	
Cramer’s coefficient			0.245			
γ -coefficient			0.546			

Low scores of “neuroticism”, “excitability”, “dysthymia”, “anxiety” characterise the phlegmatic temperament. They associated with low ability to displace negative emotions that to be one of the factors contributing to the formation of suicidal behavior. It once more establishes the importance of the negative impact of stress traumatization of the child on adult mental health, which manifests itself in raising and formation of a variety of mental pathology (personality disorder, anxiety disorders, addictions, self-injurious behavior, etc.) [2].

Conclusions

1. Statistically significant differences between the groups under study were found on the following indicators: type of temperament, “excitability” and “dysthymia” and were put down to the presence of distinctions between individuals raised in two-parent families.

2. GSAD individuals raised in two-parent families were more often punished in childhood. They were characterized by the phlegmatic type of temperament, had a lower level of education, “neuroticism”, “excitability”, “dysthymia” and “anxiety” indicators.

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