

ZESZYTY NAUKOWE

Wydawnictwo Wyższej Szkoły Agrobiznesu w Łomży

NAUKI SPOŁECZNE I HUMANISTYCZNE



Wydawnictwo Wyższej Szkoły Agrobiznesu w Łomży

Seria:

Zeszyty Naukowe

Nr 86

NAUKI SPOŁECZNE I HUMANISTYCZNE

Redaktor prowadzący: dr Wiesław Zawadzki

Łomża 2022

WYŻSZA SZKOŁA AGROBIZNESU W ŁOMŻY ACADEMY OF AGROBUSINESS IN LOMZA

RADA NAUKOWA:

prof. zw. dr hab. Zofia Benedycka - Wyższa Szkoła Agrobiznesu w Łomży, prof. nadzw. dr hab. Roman Engler - Wyższa Szkoła Agrobiznesu w Łomży, prof. nadzw. dr hab. n. med. Jacek Ogrodnik - Wyższa Szkoła Agrobiznesu w Łomży, gen. prof. zw. dr hab. n. med. Jan Krzysztof Podgórski (Warszawa), prof. zw. dr hab. Franciszek Przała - Wyższa Szkoła Agrobiznesu w Łomży, prof. zw. dr hab. Czesław Miedziałowski - Politechnika Białostocka, Wyższa Szkoła Agrobiznesu w Łomży, dr Krzysztof Janik - Krakowska Akademia im. Andrzeja Frycza Modrzewskiego, płk dr hab. Tomasz Kośmider, prof. ASzWoj. - Akademia Sztuki Wojennej, prof. dr hab. Śeljuto Bronisłava Vasilevna - Uniwersytet Rolniczy w Mińsku (Białoruś), dr hab. Gabliowska Nadeżda - IwanoFrankowski Uniwersytet Nafty i Gazu (Ukraina), prof. zw. dr hab. Povilas Duchovskis Oddział Rolnictwa i Leśnictwa Litewskiej Akademii Nauk (Wilno – Litwa), prof. zw. dr hab. n. med. Eugeniusz Tiszczenko – Uniwersytet Medyczny w Grodnie, (Grodno - Białoruś), dr John Mulhern - Ogród Botaniczny Dublin (Cork - Irlandia), prof. dr hab. Jan Miciński - Uniwersytet Warmińsko - Mazurski w Olsztynie, dr hab. Sławomir Kocira -Uniwersytet Przyrodniczy w Lublinie, prof. dr hab. Bożena Łozowicka - Instytut Ochrony Roślin w Poznaniu, prof. dr hab. Edward Gacek - Centralny Ośrodek badania Odmian Roślin Uprawnych, prof. zw. dr hab. Leonid Kompanets - Uniwersytet Łódzki, dr hab. Edward Oczeretko - Politechnika Białostocka, prof. zw. dr hab. inż. Przemysław Rokita - Politechnika Warszawska, prof. zw. dr hab. Czesław Miedziałowski - Politechnika Białostocka, prof. dr hab. Wacław Romaniuk - Instytut Technologiczno Przyrodniczy w Falentach, prof. dr hab. Stanisław Benedycki - Wyższa Szkoła Agrobiznesu w Łomży, prof. zw. dr hab. n. med. Zbigniew Puchalski – Wyższa Szkoła Medyczna w Białymstoku, prof. dr hab. Michał Gnatowski -Wyższa Szkoła Agrobiznesu w Łomży, **dr hab. inż. Zbigniew Zbytet prof. PIMR** – Przemysłowy Instytut Maszyn Rolniczych, dr hab. Mariola Grzybowska-Brzezińska - Umniwersytet Warmińsko-Mazurski w Olsztynie, dr hab. Agnieszka Brelik – Zachodniopomorski Uniwersytet Technologiczny w Szczecinie

KOMITET REDAKCYJNY

Redaktor naczelny - **dr inż. Piotr Ponichtera**, Sekretarz - **dr inż. Jolanta Puczel**, Redaktor statystyczny - **dr hab. Dariusz Załuski**, Redaktor językowy - **mgr Alina Brulińska**, Redaktor językowy - **mgr Irina Kultijasowa (język angielski)**, Redaktor językowy - **mgr Irina Kultijasowa (język rosyjski)**, Redaktor techniczny: **dr inż. Piotr Ponichtera**

NAUKI SPOŁECZNE I HUMANISTYCZNE

Redaktor prowadzący: dr Wiesław Zawadzki

RECENZENCI:

dr hab. Andrzej Borusiewwicz prof. WSA dr Agnieszka Łapińska dr Grzegorz Olszewski dr Iwona Borawska dr inż. Ireneusz Żuchowski

ZESZYTY NAUKOWE WYŻSZA SZKOŁA AGROBIZNESU W ŁOMŻY

Skład wykonano z gotowych materiałów dostarczonych przez Autorów. Wydawca nie ponosi odpowiedzialności za dostarczony materiał graficzny.

ISSN 2300-3170

Copyright © by Wyższa Szkoła Agrobiznesu w Łomży Łomża 2022

Wszelkie prawa zastrzeżone. Publikowanie lub kopiowanie w części lub w całości wyłącznie za zgodą Wydawcy.

Wydawnictwo Wyższej Szkoły Agrobiznesu w Łomży 18-402 Łomża, ul. Studencka 19 Tel. +48 (86) 216 94 97, fax +48 (86) 215 11 89 E-mail: rektorat@wsa.edu.pl

SPIS TREŚCI

1.	Natalia Lashuk The use of discussion as an active method of teaching a foreign language for university students
2.	Oksana Liaska Realization of the potential of distance learning in the context of modernization of the higher education system
3.	Nataliia Makovetska Conceptual and terminological research field of features of distance professional training of future specialists of tourist and hotel-restaurant sphere
4.	Nataliia Myronchuk Formation of self-organization competence in professional activity of future teachers in the context of educational changes and innovations
5.	Oksana M. Palyliulko Peculiarities of adaptation of educators with special needs to the conditions of higher education
6.	Vita Pavlenko Development of creativity in out-of-school educational activities in Poland52
7.	Oksana Piddubna Formation of creative activity of an individual and development of his/her practical skills by the means of integrated complex approach while performing painting art tasks
8.	Antonina Plechko Testing as the form for knowledge check of higher education seekers under distance learning conditions in Ukraine
9.	Lesya Sheludchenko Forming competencies of receivers of higher education of technical specialties in the context of environmental conservation in conditions of constant development of the society
10.	Olha Stashuk Search for organizational and methodological capabilities of higher educational institutions in Ukraine to implement the principles of dual education89
11.	Anna Chernyshova The main mechanisms of preparing primary school teachers for teaching choreography
12.	Inna Chuieva Innovative approaches of teaching the discipline "Technologies in tourism activity"
13.	Olha Haliieva Organization of an empirical study of the problem of development of state anxiety self-regulation in psychologists-to-be in the conditions of learning activity

D	vitlana Hrebinska eveloping pedagogical skills of a teacher of a professional pre-higher education stitution as a basis of his competence
Tl	leksandr Kadeniuk he academic subject "history" in the worldview formation of the modern udents
Sa	lena Kazannikova anatorium school as a training base for training specialists for the system of clusive education of Ukraine
	iana Kirika egal education in the context of shaping a competitive professional166
	etiana Krachan approving the educational process during the study of chemical disciplines175
Pr	uslan Kravets rofessional requirements for a foreign language teacher's competence in the ontext of internationalisation of higher education institutions
U	ndrii Kryskov krainian higher education institutions in Czechoslovakia in the interwar period 919-1938)195
Tl	duard Kryvolapov heoretical and methodological principles of professional training of future hecialists in tourism safety
Eı	Iarharyta Kudinova mpirical study of stress resistance levels of students with special lucational needs
5 ; 5 ;	Viesław Zawadzki, Mariusz Sakowski lat WOT- ocena koncepcji odtworzenia Obrony Terytorialnej
Pc - : Tl	Viesław Zawadzki, Mariusz Sakowski odwaliny utworzenia w 2017r. Wojsk Obrony Terytorialnej rys historyczny XX i XXI w
Regulami	in nadsyłania i publikowania prac w Zeszytach Naukowych WSA262
Wymagar	nia wydawnicze - Zeszyty Naukowe WSA264
Procedura	a recenzowania prac naukowych nadsyłanych do publikacji
w Zeszyta	ach Naukowych Wyższej Szkoły Agrobiznesu266
Załącznik	nr 1 - oświadczenie autora
Załącznik	nr 2 - deklaracja konfliktu interesów

data przesłania 12.10.2021 akceptacji artykułu 20.05.2022

Marharyta Kudinova¹

ORCID ID: https://orcid.org/0000-0002-0599-4708

¹ Khortytsia National Educational and Rehabilitational Academy

EMPIRICAL STUDY OF STRESS RESISTANCE LEVELS OF

STUDENTS WITH SPECIAL EDUCATIONAL NEEDS

Summary

The relevance of the empirical study of stress resistance of students with special

educational needs is highlighted by the fact that to this day there exist neither a single system

for determining the level of stress resistance among students nor clear criteria and indicators of

stress resistance.

The aim of this paper is to determine the levels of stress resistance of students with

special educational needs as well as to carry out a comparative analysis of stress resistance of

students with special educational needs and healthy students.

As a result of the research, two criteria of stress resistance of students with special

educational needs were identified: personal (internal) criterion and social (external) criterion.

Indicators of the formation of criteria are determined by neuropsychological stability, dominant

state, general stress resistance, stress resistance in educational activities, subjective experience

of happiness, frustration and vitality.

It is proved that the stress resistance of students with SEN is caused by the situation of

their social development and their conditions of living. It was found out that such students are

characterized by the lower level of neuropsychological stability, more passive attitude to stress,

low tonus, anxiety, greater variability of emotional tone and negative self-image when

compared to healthy students. It was confirmed that most students with SEN have the low level

of stress resistance, lower level of subjective experience of happiness, more pronounced frustration states in stress situation, and lower levels of vitality than healthy students.

Keywords: stress, stress resistance, component, criterion, indicator, level, internal (personal) and external (social) stress-resistance resources.

Introduction

The current stage of the society development may be characterized by significant political, social, economic and cultural transformations that cause the impact of stressors on young people. However, the most crucial problem is not the influence of stressors (because human existence is impossible without them), but the diversity in their origin, duration and intensity of influence, as well as the specificity of reactions to them.

One of the most vulnerable categories among those affected by stressors is represented by students with special educational needs (SEN). Firstly, they need additional permanent or temporary support in the educational process in order to ensure their right to education; secondly, the diversity, pathogenesis, nature and intensity of the stressors affecting such students are broader than those of their healthy peers; thirdly, adolescence is generally characterized by a significant number of stressful situations.

The problem of diagnosing stress resistance of individuals is actively studied by modern researchers (D. Terrence, M. Quinn, J. Cidlowski, N. Victoria, A. Murphy, J. Sheridan, A. Andrieieva, S. Bohdanov, V. Kazibekova, V. Korolchuk, A. Ekkerman, Ia. Ovsiannikova, H. Ryshko, T. Ruda, Kh. Stelmashchuk, V. Stepanenko, M. Khutorna, T. Tsyhanchuk and others). Their works are devoted to singling out and substantiating the criteria of stress resistance from various aspects: in accordance with the sphere of the individual's activity, with the conditions of his/her professional activity, with extreme situations etc.

At the same time, special studies of stress resistance of students with special educational needs are insufficient, although this problem is of extreme importance for the modern society.

Aim, subject and research methods

The aim of the study is to determine the levels of stress resistance of students with special educational needs and to carry out a comparative analysis of stress resistance among students with special educational needs and healthy students.

The subject of the research is the parameters of stress resistance among students.

Research methods: theoretical (analysis, comparison, systematization, generalization); empirical (a) a set of methods for studying biological and personal resources of stress resistance, namely: methodology "Forecast" for determining neuropsychological stability and the risk of maladaptation in stress; the test by M. Padun to determine the stress resistance of personality; A. Andreieva's methodology of diagnosing stress resistance in educational activities; methods of determining the dominant state: its short version by L. Kulikov; S. Muddy's viability test; b) a set of methodologies that provide diagnostics of indicators of psychological well-being, in particular the behavioral-regulatory component of stress resistance, namely: methodology for diagnostics of socio-psychological adaptation by K. Rogers and R. Diamond in the adaptation of O. Osnytskyi; methodology "Lifestyle Index"; methodology "Coping Strategy Indicator" by J. Amirkhan; methodology "Scale of Basic Beliefs" developed by R. Janoff-Bulman in its modification by M. Padun; methodology for the diagnosis of irrational attitudes by Albert Ellis; methodology "Style of Self-regulation during Educational Activities". Statistical analysis was performed using the statistical software package Statistica 6.0.

Research results

Stress resistance is a systemic characteristic of personality, based on a set of innate and acquired psychophysiological qualities; it consists of personal and behavioral components and is expressed in the ability to withstand significant intellectual, volitional and emotional loads, manage own emotions and successfully carry out living without harmful consequences. [2, p. 51].

Stress resistance of an individual consists of two groups of resources: external (social) and internal (personal) ones. Internal resources are the foundation of stress resistance. They are divided into three groups: biological, personal and behavioral resources. Personal resources include personal, emotional, cognitive and motivational-volitional components [3, p. 165]. These components of stress resistance are interconnected, such a relationship is not summary but integrative in its nature, due to the fact that stress resistance is regarded in this research as a systemic characteristic of an individual.

In order to study stress resistance of students with SEN, we have identified criteria, indicators and levels of its formation. The concept of "criterion" is defined as a feature on the basis of which the assessment, definition or classification of something is performed [4, p. 59]. Criterion in psychology is a feature by which mental phenomena, actions or activities are classified and evaluated by an appropriate indicator [5, p. 164]. In the context of our study,

criteria will be understood as groups of resources of stress resistance, which reflect its most significant characteristics and are subject to evaluation.

Criteria usually include indicators. Indicators are data (characteristics, qualitative / quantitative properties) on the basis of which it is possible to draw conclusions about the result of any process [1, p. 1024]. Indicators through which the criteria of the studied object are expressed may be differentiated by the levels of measurement and by the extent to which they manifest themselves.

Considering the next category of our study – the levels of stress resistance development in students with SEN, we have to pay attention to the understanding of "level" as a concept. This term occurs in the psychological literature when it comes to assessing the development of a certain quality of personality or the degree of its formation. The level of measurement denotes the quantity or quality of information received, as well as the result of achieving something [5, p. 380]. In most cases, researchers distinguish between high, medium and low levels of formation (development) of certain criteria. In our opinion, the level of stress resistance development is determined by the degree of manifestation in students with SEN of criteria and indicators that comprise stress resistance.

In accordance with the abovementioned concepts, stress resistance involves the definition of signs (criteria) and characteristics (indicators) of development, as well as the degrees of its manifestation. According to the structure of stress resistance, we singled out personal (internal) and social (external) criteria. We use indicators to determine neuropsychological stability, dominant state, general stress resistance, stress resistance during educational activities, subjective experience of happiness, frustration and vitality.

In the course of our research aimed at determining the levels of stress resistance of students with special educational needs, a sample group was formed including 79 students of the Municipal Institution of Higher Education «Khortytsia National Educational and Rehabilitational Academy» of Zaporizhzhia Regional Council (experimental group – 35 people, control group – 43 people). The study of stress resistance in students with special educational needs involved the identification of its specificity in comparison with healthy students. For this purpose, the selected parameters of stress resistance were compared by their levels in the experimental group (EG – students with SEN) and the control group (CG – healthy students).

Firstly, we consider the differences in the distribution of students by the level of neuropsychological stability (Fig. 1).

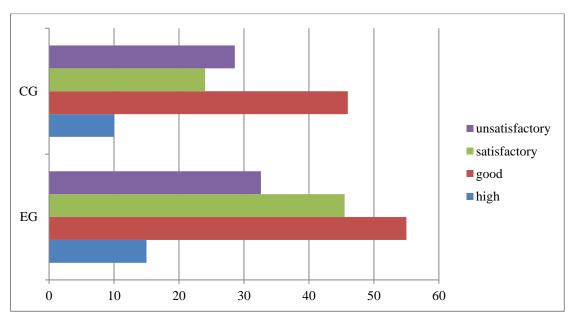


Figure 1. Distribution of students by the level of neuropsychological stability. Source: Own study.

In contrast to CG students, EG students are mainly characterized by satisfactory (45.5% of the sample group) and unsatisfactory levels (32.6% of the sample group) of neuropsychological stability (χ 2Emp = 73.235, p <0.0001). The majority of CG students have the high level of neuropsychological stability, in contrast to EG students, among whom the insufficient level of neuropsychological stability is predominant. Such a key biological resource of stress resistance as neuropsychological resistance in EG students is underdeveloped.

Now let's consider the differences in distribution of students by the level of the dominant state manifestation (Fig. 2). In terms of active attitude to the situation of stress (χ 2Emp = 40,855, p <0,0001), tonus (χ 2Emp = 58,704, p <0,0001), calmness (χ 2Emp = 35,759, p <0,0001), stability of emotional tone (χ 2Emp = 50,075, p <0,0001), positive self-image (χ 2Emp = 163,982, p <0,0001) CG students excel. No statistically significant differences were found in the level of life satisfaction (χ 2Emp = 1.808). Thus, in a situation of stress, EG students are characterized as being less calm, passive in overcoming difficulties, having greater emotionality and more critical attitude towards themselves, blaming themselves for the causes of a difficult situation. Only 2.8% of EG students have the high level of calmness in stressful situations (whereas among CG students this figure reaches 24%).

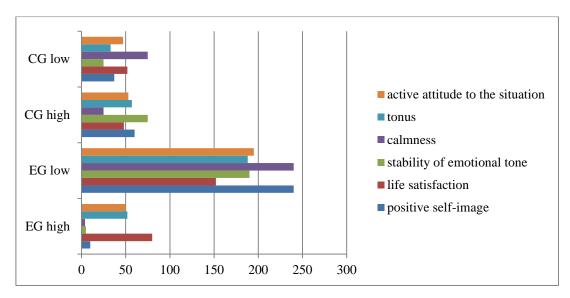


Figure 2. Distribution of students by the level of the dominant state manifestation. Source: Own study.

Only 3.7% of EG students are characterized by a pronounced positive self-image (whereas among healthy students this figure is 68%). Thus, EG students are generally characterized by worse mental health indicators – greater anxiety, passivity in overcoming difficulties and negative self-esteem. However, the absence of statistically significant differences in the level of life satisfaction of students in the control and experimental groups indicates signs of a crisis of personal and professional self-determination.

Next we consider the differences in the distribution of students by stress resistance (Fig. 3).

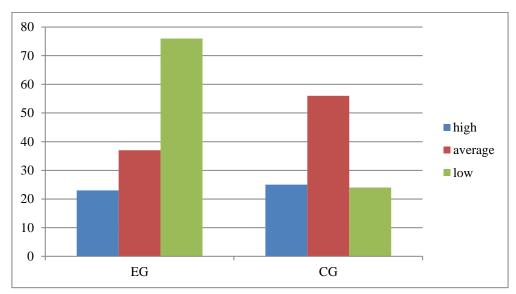


Figure 3. Distribution of students by the level of stress resistance. \\

Source: Own study.

The majority of EG students (76% of the sample group) have the low level of stress resistance, whereas among CG students the average level of stress resistance is predominant (56% of the sample group). Differences between students in the level of stress resistance are statistically significant (χ 2Emp = 96,750, p <0,0001).

Then we consider the differences in the distribution of students according to stress resistance in educational activities (Fig. 4).

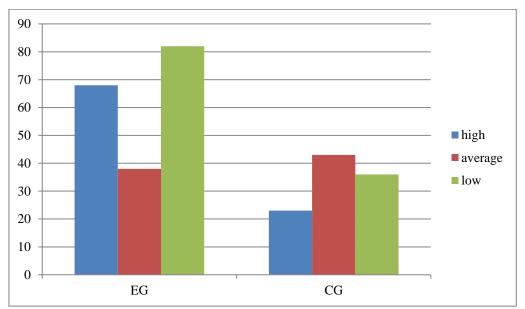


Figure 4. Distribution of students by the level of stress resistance in educational activities. Source: Own study.

According to the level of stress resistance in educational activities, no differences in the distribution of students were found (χ 2Emp = 1,334, p> 0.05). The majority of EG students (38% of the sample group), as well as the majority of CG students (43% of the sample group) have the average level of stress resistance in educational situations.

After that we consider the differences in the distribution of students by the level of their subjective experience of happiness (Fig. 5).

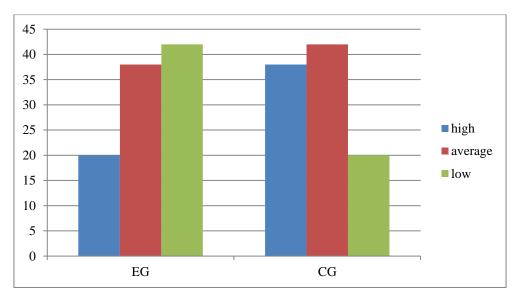


Figure 5. Distribution of students by the level of subjective experience of happiness. Source: Own study.

The study helped to find out that the majority of EG students have the average level of subjective feelings of happiness, in contrast to students CG most of whom have average and high levels of this indicator (χ 2Emp = 19,905, p <0,0001). 38% of EG students are characterized by the average level of subjective happiness. Despite the lack of differences in life satisfaction and overall stress resistance of students in the control and experimental groups, CG students are characterized by a greater sense of happiness than EG students.

Now let's pay attention to the differences in the distribution of students by their level of frustration (Fig. 6).

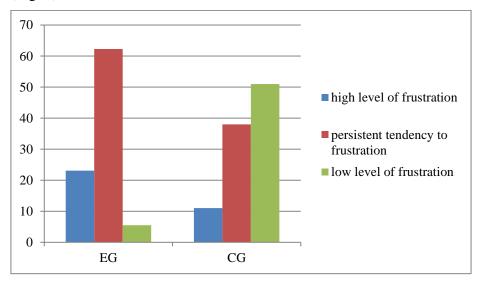


Figure 6. Distribution of students by the level of frustration.

Source: Own study.

Stress frustration states are more pronounced in EG students (χ 2Emp = 50,353, p <0,0001). 62.3% of EG students are characterized by a tendency to frustration in stress, and 23.1% of individuals have the high level of frustration. 51% of CG students have the low level of frustration. Thus, students with SEN are more prone to frustration in stressful situations. These results confirm the abovementioned differences in the indicators of the dominant state and neuropsychological tension in favor of healthy students.

Finally, let's consider the differences in the distribution of students by their level of vitality (Fig. 7). The EG is dominated by the average (32.2% of the sample) and low (46.2% of the sample) levels of viability, while CG students are characterized by an almost even distribution of viability by levels of development (χ 2Emp = 0.526, p> 0.05).

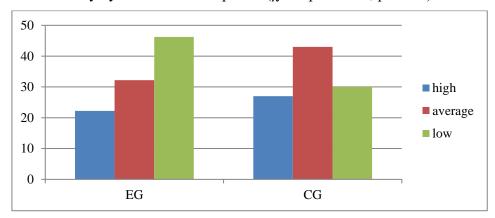


Figure 7. Distribution of students by level of vitality.

Source: Own study.

Thus, the stress resistance of students with SEN is generally lower in most indicators of biological and personal resources when compared to healthy students.

Conclusions

Having conducted the empirical research, it was found out that students with SEN are characterized mainly by satisfactory (45.5% of the sample group) and unsatisfactory (32.6% of the sample group) levels of neuropsychological stability in contrast to healthy students, who have the high level of resistance (χ 2Emp = 73,235 , p <0.0001). According to the indicators of active attitude to the situation of stress (χ 2Emp = 40.855, p <0.0001), tonus (χ 2Emp = 58.704, p <0.0001), calmness (χ 2Emp = 35.759, p <0.0001), stability of emotional tone (χ 2Emp = 50,075, p <0,0001), positive self-image (χ 2Emp = 163,982, p <0,0001) healthy students have higher results. The majority of students with SEN (76% of the sample group) have the low level of stress resistance, whereas among healthy students one may observe the average level of stress

resistance (56% of the sample group). Differences between students in the level of stress resistance are statistically significant (χ 2Emp = 96,750, p <0,0001). Students with SEN were found to have a predominance of the average level of subjective feeling of happiness, in contrast to healthy students where medium and high levels dominated (χ 2Emp = 19,905, p <0,0001). Stress in the state of frustration was more pronounced in students with SEN (χ 2Emp = 50,353, p <0,0001). They also mostly have the average (32.2% of the sample group) and low (46.2% of the sample group) levels of vitality, while healthy students are characterized by an almost even distribution of vitality by the level of development (χ 2Emp = 0.526, p> 0.05).

It is proved that the stress resistance of students with SEN is predetermined by their situation of social development and conditions of living. They are characterized by the lower level of neuropsychological stability, more passive attitude to stress, low tonus, low level of calmness, greater variability of emotional tone and a negative image of themselves compared to healthy students. Most students with SEN have low levels of stress resistance, lower levels of subjective experience of happiness, more pronounced frustration states in stress situations, and lower levels of vitality than healthy students.

References

- Big monolingual dictionary of the modern Ukrainian language (with additions) / chief ed.
 V. T. Busel. Kyiv; Irpin: "Perun" Publishing, 2005. 1728 p.
- Kudinova M. S. The concept of stress resistance in modern psychological discourse. Scientific Bulletin of Kherson State University. Series of Psychological Sciences. 2016. № 6 (25). Pp. 48–54.
- 3. Kudinova M. S. Structural and component analysis of the phenomenon of stress resistance of a personality. Bulletin of Volodymyr Dahl East Ukrainian National University. Theoretical and applied problems of psychology. 2018. № 1 (45). Pp. 156–173.
- 4. Novikov A. M. Methodology: a dictionary of the system of basic concepts. 2013. 208 p.
- Explanatory Russian-Ukrainian dictionary of psychological terms: dictionary / V. Brodovska, V. Hrushevskyi, I. Patryk. Kyiv: "Professional" Publishing House, 2007. 512 p.