

On the question of stress resistance of future teachers at the stage of training at the university

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Abstract. The article presents an analysis of the phenomenon of stress and stress resistance in the scientific psychological and pedagogical literature. The problem of stress tolerance in the professional activity of a teacher-psychologist is considered. It is noted that the stress resistance of students in educational activities is a complex property of the individual, which is characterized by the necessary adaptation of the student to the influence of external and internal factors in the course of educational activities. The factors influencing the development of stress tolerance and a positive attitude to learning activities are considered. The article presents the results of an empirical study of stress resistance in future teachers-psychologists at the stage of training in higher education. The features of the perceptual assessment of students' stress resistance at the final stage of training are shown. It is established that graduates are able to clearly define the goals of their educational and professional activities and choose the best ways to achieve them. They are distinguished by the desire to cope with difficulties independently, the ability to analyze the difficulties encountered and overcome them, unlike first-year students. The study involved students of the 1st and 4th courses of the psychological and pedagogical direction, in the number of 128 people. The following methods were used: self-assessment of the stress resistance of S. Cowhen and G. Williamson, the questionnaire of the perceptual assessment of the type of stress resistance of N. P. Fetiskina, methods of mathematical and statistical processing of the obtained data: descriptive statistics, determination of the reliability of differences: the Fisher criterion. It is reliably established that graduates have a moderate type of stress resistance, and 1st-year students at the initial stage of training are characterized by moderate instability to stress.

1 Introduction

The relevance of the studied problem is due to the fact that at the stage of training at the university, it is important for future teachers-psychologists to have a conscious idea of the specifics of their future professional activities, which are characterized by regular stressful situations that require immediate resolution and responsibility for the decisions made. The

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professional activity of a teacher-psychologist is characterized by intensive psycho-emotional interaction with the subjects of labor. Therefore, it is important to develop students' skills in managing emotions, mobilizing personal resources, and developing stress tolerance as a professionally important quality during their studies at the university [1]. Studies of both domestic and foreign authors are devoted to the problem of stress and stress resistance. Scientists have identified and described various types of human behavior, depending on the presence of psychological defense mechanisms and coping strategies present in certain stressful situations (V. A. Bodrov, B. H. Vardanyan, J. P. Grebennikov, E. S. Romanova, S. Hobfall, V. Fletcher, S. Folkman, R. Lazarus, et al.). Some studies are devoted to stress resistance within the framework of problems of pedagogical psychology, but they are mainly aimed at studying and developing resistance to stress in teachers (A. A. Baranov, J. B. Karapetyan, A. A. Naprimerov, A. A. Rean, S. V. Subbotin, etc.) [2, 3, 4]. The formation of stress resistance in the educational activities of students, today, is a little-studied problem that requires further study. The specifics of professional activity leave their mark on the psycho-emotional state of the teacher-psychologist. The presence of daily stressful factors in the form of frequently occurring problematic pedagogical situations, high dynamism of activity in conditions of lack of time, role uncertainty and frequent changes in the positions of the teacher when interacting with the subjects of the educational space, the constant influence of social assessment are the causes of huge emotional overload for each representative of this profession. According to A. K. Markov, L. M. Mitin, A. I. Shcherbakov et al., the teaching profession makes special demands on such an integral characteristic of the individual as stress resistance, since it justifiably refers to one of the most significant professional qualities of a teacher [5]. Stress resistance of the individual is manifested in the preservation of the ability to social adaptation and maintain significant interpersonal relationships, in the desire for successful self-realization, achievement of life goals, the ability to maintain working capacity, physical and mental health. In the studies of A. A. Baranov, who studied the stress resistance of the teacher, it was empirically established that the level of development of the stress resistance of the teacher significantly increases with the predominance of internal motivation in the motivational complex, a high and adequate assessment of oneself as a professional, as well as formation of professional and pedagogical skills. The researcher associates stress resistance in pedagogical activity with the provision of variable coping strategies due to a different combination of coping resources of the teacher as a person and subject of activity. The author notes that resistance to mental stress is a professionally significant quality of the subject of the educational process, which determines not only the success of mastering pedagogical activity, increasing the productivity of training and education, but also the property that contributes to the self-realization of the teacher as a person [6]. According to G. Selye, stress or adaptation syndrome is "a non-specific reaction of the body in response to a variety of damaging effects" [7]. The author developed a three-component structure of stress: he identified three stages of this process: the stage of anxiety; the stage of resistance (adaptation) and the stage of exhaustion. According to V. V. Suvorova, stress is "a functional state of the body that occurs as a result of an external negative impact on its mental functions, nervous processes or the activity of peripheral organs" [6]. B. H. Vardanyan defines stress resistance as a special interaction of all components of mental activity, including emotional ones. He writes that stress tolerance "... can be more specifically defined as a personality property that provides a harmonious relationship between all components of mental activity in an emotionogenic situation and, thereby, contributes to the successful performance of the activity" [2]. According to most scientists, "stress tolerance" includes such particular components as emotional stability, psychological resistance to stress, stress resistance, and frustration tolerance. According to the empirical research of A. A. Andreeva, the factors influencing the development of stress tolerance and

a positive attitude to educational activities are: external factors – pedagogical influence, interpersonal interaction, the system of activities in the university, stimulation; and internal-psycho-physiological, socio-psychological, psychological and pedagogical features of the individual. The author notes that the stress resistance of students in educational activities is a complex property of the individual, which is characterized by the necessary adaptation of the student to the influence of external and internal factors in the course of educational activities [8]. Scientists have found that increasing stress tolerance in university students not only contributes to the creation of an emotionally stable, psychologically healthy personality, capable of self-regulation, successful adaptation and socialization in society, but also contributes to the development of a positive attitude to educational activities, which increases the effectiveness of its indicators. Lozgacheva, in her work on the formation of stress resistance at the stage of professionalization, understands stress resistance as a "complex property of a person", which is characterized by the necessary degree of adaptation of an individual to the effects of extreme or cumulative external and internal factors in the course of life, due to the level of activation of the resources of the body and the individual's psyche, manifested in indicators of its functional state and performance [9]. When studying the professional activity of a teacher-psychologist, it is important to take into account the influence of professional stress on the personality of a specialist in the process of performing professional functions. Professional stress is considered by scientists as a process of interaction between the individual and the professional environment, in which the requirements of the professional environment significantly exceed the personal and professional resource of the subject of professional activity and threaten his professional development. Samoukina notes that "Professional stress is a tense state of an employee that occurs under the influence of emotionally negative and extreme factors associated with the professional activity performed" [10, 11]. Researchers have established empirically the leading stressful factors in pedagogical activity. These include: problematic psychological and pedagogical situations and tasks that generate professional difficulties in the mental structures of the teacher. Pedagogical difficulties are determined, on the one hand, by the complexity of the pedagogical situation, and, on the other hand, by the operational and personal resources of the teacher. From the point of view of overcoming stressful situations, the issues related to increasing the stress tolerance of teachers, expanding the repertoire of constructive strategies for overcoming stressful situations in pedagogical activity, and increasing the coping competence of teachers become important. Most stress theories describe the process of coping with stress as a reactive process that occurs immediately after exposure to a stressor. At the same time, it is important to note that often, not the events themselves, but a subjectively high estimate of the probability of occurrence of certain events can become a serious stressful factor. The threat may actually be insignificant or unlikely, but in humans it creates serious stress due to the prediction of resource loss. S. Hobfall in his theory of resource conservation considers stress in terms of loss or threat of loss of resources. According to the author, resources are values that individuals or communities seek to acquire, preserve, multiply and accumulate. Such resource potential for a person largely determines the quality of life and acts as predictors of well-being. A number of personal traits contribute to successful coping with stress. These include: emotional stability and maturity, self-confidence, the need for self-actualization, the ability to manage your actions and actions, to be responsible to yourself for everything that happens – a high level of subjective control. Intrapersonal mechanisms of overcoming stress states are represented by mechanisms of psychological protection and coping mechanisms. Resistance to psychological stress provides a dynamic balance between all the components of mental activity in a difficult situation and thus contributes to the successful implementation of the teacher's professional activities. In modern Russian psychology, A. G. Maklakov develops the concept of personal adaptive

potential – a personal property of a person that provides resistance to various stress factors [12]. Adaptive abilities are determined by the characteristics of the individual, according to A. G. Maklakov, creating the possibility of adequate regulation of the psychophysiological state of a person. The more they are developed, the higher the probability of maintaining normal working capacity and effective activity of the teacher under the negative effects of external conditions, the wider the range of stress factors to which he, as a professional, can adapt. The development of a person's stress tolerance, which helps in overcoming the negative consequences of a stressful situation, is associated with the search, preservation and adequate use of resources. In the works of domestic researchers, many components of stress resistance or qualities associated with stress resistance are identified: tolerance, assertiveness, initiative, desire for self-development, communication. S. K. Bondyreva, A. A. Derkach, for example, point to tolerance as a significant professional quality in the prevention of stress resistance. Vodopyanova identifies such characteristics of teachers-psychologists, based on stress resistance, as the ability to social adaptation, the preservation of significant interpersonal relationships, ensuring successful self-realization, achieving goals [13]. Romanova points out such professional characteristics of a teacher-psychologist associated with his resistance to stress as communication skills, psychological and emotional stability, tolerance and non-evaluative attitude to people, the desire for self-knowledge and self-development, the ability to change the ways of solving problems arising in the course of activity in accordance with changing environmental conditions. It is also important to take into account the factor of readiness and awareness of professional choice, which undoubtedly plays an important role in the formation of the adaptation mechanism [14, 15, 16]. The individual style of self-regulation is formed due to the interaction of a person with the surrounding world, and its effectiveness is provided by the mechanism of regulation of the level of activation (energy resource) and the variety of forms of behavior (personal and psychological resource). In connection with the study of the mechanisms of voluntary and effective management of the teacher-psychologist's own psychophysiological states, actions, actions, the problem of preserving coping resources for his professional activity becomes important. The resources used by educational psychologists form the potential for coping with unfavorable situations in professional activity, which provides an adaptive function: it gives confidence, supports individuality, and strengthens self-esteem. However, stressful situations require additional resources. Thus, personal maturity contributes to the formation of holistic professional ideas, building a realistic career trajectory and the use of a wide range of constructive ways to overcome stressful situations [17, 18, 19, 20, 21]. Therefore, the issues related to the successful functioning of teachers-psychologists, adaptation and development of effective strategies for overcoming stressful situations associated with uncertainty and depending on the activity of the life position of a particular individual, its potential abilities for self-realization are of particular relevance. It is obvious that the achievement of positive results in professional activity is not possible without the study of each teacher-psychologist of the mechanisms of arbitrary and effective management of their own psychological and physiological states, actions, actions. Mastering the skills of highly effective professional overcoming behavior, high stress resistance helps to prevent the occurrence of symptoms of professional burnout and contributes to the preservation of the health and effectiveness of the professional's personality.

2 Research materials and methods

The problem of stress has traditionally been of great interest to scientists and practitioners, and links many fundamental and applied studies. Extensive scientific experience on the problem of studying and dealing with stress has been accumulated abroad (V. Wundt, W.

James; R. Yerkes, J. Dodson; W. Cannon; T. Cox, K. McKay; R. Lazarus; R. B. Maimo; D. Mechanik; G. Selye; Z. Freeman, etc.). There is a constantly growing interest in the study of the topic of stress and stress resistance in Russian science. Such prominent psychologists as: V. A. Ababkov, V. V. Bodrov, A.V. Waldman, M. M. Kozlovskaya, O. S. Medvedev, N. E. Vodopyanova, G. I. Kositsky, V. M. Smirnov, L. A. Kitaev-Smyk, A. B. Leonova, I. G. Malkina-Pykh, V. L. Marishchuk, K. I. Pogodaev, Yu. V. Shcherbatykh, etc. However, despite the presence of a significant number of works that reveal the psychological problems of stress and stress resistance of the teacher (K. A. Abulkhanova-Slavskaya, V. A. Bodrov, A.M. Bokovikov, P. G. Zilberman, V. Zhuravkova, V. L. Marishchuk, L. M. Mitina, N. A. Podymov and others), in the scientific literature the problem of stress resistance is presented within the framework of personality theories (G. Allport, H. Eysenck, R. Cattell, C. Rogers et al.), "theories of achievement motivation" (D. McClelland et al.), theories of homeostasis (u. Kennon) and stress (G. Selye), theories of temperament and properties of the nervous system (I. P. Pavlov, V. D. Nebylitsyn, V. S. Merlin, etc.), theories of activity reliability (B. F. Lomov, etc.), concepts of professional self-awareness (L. M. Mitina). The professional activity of a modern teacher-psychologist requires constant and maximum mobilization of his own resources, making demands on his stress resistance and adaptability. The ability to successfully cope with a state of stress and minimize its negative impact is an important skill for a teacher-psychologist.

Special attention was paid to the value-semantic orientations of the individual (K. A. Abulkhanova-Slavskaya, L. I. Antsyferova, B. S. Bratus, F. E. Vasilyuk, M. Yu. Denisov, V. S. Nikolaeva, A.V. Poletaeva, A. O. Prokhorov, I. A. Saparova, V. Frankl, etc.), as well as the role of cognitive assessment in the emergence and development of a stress reaction (S. L. Belykh, R. Lazarus, R. P. Milrud, U. Neisser, J. Piaget, H. Renschmidt). Studies were conducted on the influence of gender, age, cultural, and professional characteristics of the individual on the choice and implementation of coping strategies. Argentova, T. Y. Bilgildeeva, A.M. Bogomolov, V. A. Bodrov, V. M. Voynenko, M. A. Kotik, B. F. Lomov, N. A. Sirota, E. V. Topolova, V. M. Yaltonsky, J. Birkimer, F. Blanhard-Fields, G. Seck, L. Sulsky, G. Tome, V. Cleaver).

The analysis of empirical psychological and pedagogical studies devoted to various aspects of professional stress and personal stress resistance has shown that, despite the breadth of research issues, research on the problem of stress resistance of future teachers-psychologists at the stage of training in higher education and the formation of stress resistance as a professionally important quality of a teacher-psychologist is currently insufficiently presented in science.

The purpose of this study was to study the stress resistance of future teachers-psychologists at different stages of training at the university, as well as to identify the features of stress resistance of graduate students in comparison with students of the initial stage of training in the first year.

In our study, to confirm the hypothesis that the indicators of stress resistance in future teachers-psychologists at different stages of training may differ, the following methods were used: the study of self-assessment of stress resistance using the method of S. Cohen and G. Williamson, the questionnaire of perceptual assessment of the type of stress resistance of N. P. Fetiskin, methods of mathematical and statistical processing of the data obtained: descriptive statistics, determination of the reliability of differences: the Fisher criterion

3 Results and discussions

The presented empirical study involved 128 subjects, who were future teachers-psychologists of the first and fourth courses of the Southern Federal University. Among

them, 9% of boys and 91% of girls, the age range of the subjects is from 18 to 27 years. The study was conducted in several stages. At the first stage, a theoretical analysis of the problem of professional stress and stress tolerance, as a professionally important quality of future teachers-psychologists, was carried out. The selection of methodological tools reflecting the research task is carried out. Then, in two stages, an empirical study was conducted. First, the self-assessment of the respondents' stress resistance was studied according to the method of S. Cowhen and G. Williamson, then the perceptual assessment of the type of stress resistance according to N. P. Fetiskin was studied. The obtained results were subjected to mathematical and statistical processing, the analysis of the obtained results was carried out, and conclusions were drawn.

According to the results of the study of self-assessment of stress resistance of future teachers-psychologists of the first and fourth courses, it was revealed that almost a third of 1st-year students assess their stress resistance as good (41.2%). A fifth of respondents-18.2% - consider their stress resistance excellent, not much less than a third (27.0%) of respondents have satisfied stress resistance, 10.3% – 1st year students rated their stress resistance as poor and 3.3% say about very poor stress resistance. In the group of 4th year students, the prevailing majority (36.0%) consider their stress resistance excellent, 30.7% - good. Half of the respondents (25.0%) consider their stress tolerance satisfactory, only 6.3% - bad and 3.3% - very bad.

Therefore, it can be assumed that the 4th year students (graduates) are distinguished by a greater confidence in their ability to withstand stress and confidence in their adaptive capabilities in comparison with the 1st year students. To verify this assumption, statistical processing of the obtained data was carried out using the Fisher criterion. Significant differences were found in the frequency of occurrence of such assessments as "satisfactory stress resistance" and "very poor" stress resistance. According to other estimates, no significant differences were found. Therefore, we can say that 1st year students are more likely to assess their stress resistance as satisfactory and very poor, they are more likely than 4th year students to feel insecure in their ability to cope with difficulties in personal and educational and professional activities, often unable to control irritation and cope with unforeseen situations that require immediate resolution and responsibility. However, it should be noted that students, both first and fourth years, indicate that they are generally able to cope with difficult, stressful situations in their educational and professional activities and personal life.

Further, according to the results of the study of the perceptual assessment of stress resistance according to the method of N. P. Fetiskin, it was revealed that half of the 4th year students (50%) have moderate stress resistance, high stress resistance is noted in 27% of graduates, moderate instability to stress was shown by 18% of 4th year students and 5% of graduates are characterized by instability to stress. In the 1st year students, moderate instability to stress prevails – 46% of respondents, moderate stress resistance in 39% of first-year students, high stress resistance was observed by 9% of 1st year students and 6% instability to stress.

4 Conclusion

Therefore, it can be assumed that graduates, for the most part, clearly define the goals of their educational and professional activities and choose the best ways to achieve them. They are distinguished by the desire to cope with difficulties independently, the ability to analyze the difficulties encountered and overcome them. Students of the 4th year can work for a long time with great effort, they are able and strive to rationally allocate time. To verify this assumption, statistical processing of the obtained data was carried out using the Fisher criterion. Significant differences were found in the indicators of high stress

resistance of 1st and 4th year students and moderate instability to stress. Indicators of moderate stress resistance are in the zone of uncertainty. Therefore, we can conclude that the 4th year students are characterized by a moderate type of stress resistance, and the 1st year students demonstrate a moderate instability to stress.

Thus, the hypothesis of the study that the indicators of stress resistance in future teachers-psychologists indicators of stress resistance differ is confirmed. At the initial stage of training, first-year students showed lower values of stress resistance, in contrast to graduates who complete their studies at the university. Lower indicators of stress tolerance of first-year students can be associated with various factors, both objective and subjective, such as: a change of residence and separation from the parent's home, a different organization of the educational process, in comparison with studying at school; insufficiently formed skills of independent organization of educational and professional activities and life, in general, etc. Higher indicators of stress resistance of graduates can be due to the formed skills of constructive overcoming of stressful situations, skills of psycho-emotional self-regulation, as well as the acquired knowledge and skills, fixed in practical activity, will certainly contribute to high indicators of stress resistance.

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