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PSYCHOPHYSIOLOGY OF STRESS

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Abstract. This study provides a psychological description of the psychophysiology of stress, providing information on the level, origin, and general concept of stress. It also presents examples of results based on psychological research on the psychophysiology of stress.

Keywords: Stress, psychophysiology, psychological approaches, psychological adaptation, motivation, education.

STRESSNING PSIXOFIZIOLOGIYASI

Annotatsiya. Ushbu tadqiqotda stressning psixofiziologiyasining psixologik ta'riflanib, stressning darajasi, kelib chiqishi va umumiy tushunchasi haqida ma'lumotlar berib oʻtiladi.

Shuningdek, stressning psixofiziologiyasi bo'yicha psixologik tadqiqotlarga asoslangan natijalar misollar tariqasida ko'rsatib o'tilgan.

Kalit so'zlar: Stress, psixofiziologiya, psixologik yondashuvlar, psixik adaptatsiya, motivatsiya, ta'lim.

Introduction

The psychophysiology of stress involves the study of how the mind and body respond to stressful situations. This field combines psychology and physiology to understand how stress affects our mental and physical health. Understanding the psychophysiology of stress can help people better manage their stress levels and improve their overall well-being. By recognizing the physiological signs of stress, people can take proactive steps to protect their health and reduce the harmful effects of stress. By studying hormone levels, heart rate, and other bodily functions, researchers can understand the intricacies of the stress response.

The psychophysiology of stress is crucial for identifying risk factors and developing effective coping strategies. Theorists argue that stress is the result of the body's natural response to perceived threats, known as the fight-or-flight response. The body releases hormones such as cortisol and adrenaline, which prepare it to fight or flee from stress. Psychophysiological measures such as heart rate and skin conductance can be used to assess the body's response to stress in research settings.

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In psychophysiology and psychology, stress resilience is studied as a personality trait that contributes to high performance in extreme environments. Its study is based mainly on the study of conditions that indicate insufficient development of stress resilience and the identification and differentiation of multi-level physiological and, in fact, psychological factors (external and internal) under the influence of various laboratory or real extreme (stressful) conditions. As a result, physiological, psychophysiological, intellectual, volitional and personality characteristics of a person are revealed, which are characterized as changes that occur in a person under the influence of some factor. From this perspective, the characteristics under study are defined as signs of instability, and stress resilience is defined as a component of self-control that acts in conjunction with others: psychophysiological, personal, intellectual, volitional, emotional. In our opinion, a person's stress resistance is not a component of selfmanagement. Stress resistance arises as a positive result of self-management, and changing various human characteristics does not always mean that it is a negative phenomenon. A person's self-management is a coordinator of multimodal characteristics and abilities, which leads to the emergence of the needs necessary for the successful functioning of a person in a given situation and conditions. Based on the above considerations about stress, we can see that one of the main issues is not only to study the self-management of a person in a stressful situation theoretically, but also to study it in practice. Based on this, we also set ourselves the goal of using a methodology dedicated to the adaptive capabilities of individuals in stress management in our research, in the third chapter we tried to explain the above theoretical ideas from a practical perspective. An important aspect of human stress is that in the "individualexternal environment" system, that is, in the process of maintaining adequate mutual relations, psychic adaptation plays a very important role. Psychical adaptation is considered as the result of complete self-management activities (at the level of "operational stability"). But in this case, it is necessary to distinguish its systemic organization. Such a view seems rather abstract. Here it is necessary to introduce the concept of need. The maximum satisfaction of current needs is an important factor in the adaptation process. Thus, psychic adaptation is such a connection between the individual and the external environment, as a result of which the individual's activity is carried out, which allows him to satisfy his current need and achieve the goal associated with it, while achieving the maximum connection between the requirements of the external environment and human activity and behavior. By applying applied research, group discussions, practical experiments and interactive methods to the discipline psychophysiology, we can bridge the gap between theory and practice.

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These approaches not only enhance the educational experience for students, but also help improve our understanding of psychophysiological processes, which will lead to improved diagnosis and treatment of related diseases. In addition, they support a holistic and interdisciplinary approach to the study of psychophysiology, which is important in a field that encompasses both physiological and psychological aspects of human functioning. Active learning strategies also encourage collaboration and communication among students.

Group discussions and collaborative projects can enhance the learning experience by allowing students to exchange ideas, challenge each other's assumptions, and arrive at collective solutions. In the context of psychophysiology, this reflects the interdisciplinary nature of the field, where concepts from psychology, biology, and medicine come together.

Students can be exposed to different perspectives and approaches to problem solving.

Psychophysiology is also a rapidly evolving field, and it is important for students and professionals to stay up-to-date with the latest research and developments. Active learning strategies foster learning habits by encouraging students to explore new concepts and seek out the latest research in the field. By giving them the tools and motivation to be active in their learning, these strategies enable students to continue their education and professional development outside the classroom. Incorporating active learning strategies into psychophysiology classes can significantly enhance students' learning experiences. By solving real-life problems, fostering collaboration and communication, enhancing knowledge retention and application, and encouraging lifelong learning, these strategies prepare students for the multifaceted challenges of the field. Psychophysiology educators should consider integrating active learning strategies into their teaching methods to provide students with a comprehensive and effective learning experience in this exciting field. The importance of activeness in the transformation of human consciousness is also important. If a child begins to show activity from birth, then this activity later turns into activity. Activity is the way a person affects the nature, social environment, and other people around him. All this leads to a change in the consciousness of people. The interaction of a person with the world around him is manifested in a system of objective relations, objective relations and connections necessarily arise in any real groups. These objective relations of group members are reflected in subjective interpersonal relations. Any production requires the unity of people. No human society can organize full-fledged joint activities without proper understanding of each other if relations are not established in it. Human thinking is also a product of historical development.

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Initially, human thinking was closely connected with elementary labor activity. This was concrete-practical thinking. Later, thinking developed from concrete to abstract thinking, or from practical to theoretical thinking. Of course, abstract and theoretical thinking grew without being separated from experience. Logical forms of thinking also emerged and developed in the course of labor experience and the processes of cognition of the world. With the help of thinking, a person discovers important connections and relationships between phenomena, the laws of nature and social life. People strive to create a worldview based on science and strive for this.

REFERENCES

- 1. Turemuratova, Aziza, Rita Kurbanova, and Barno Saidboyeva. "EDUCATIONAL TRADITIONS IN SHAPING THE WORLDVIEW OF YOUNG PEOPLE IN FOLK PEDAGOGY." Modern Science and Research 2.10 (2023): 318-322.
- Kurbanova, R. J., and B. E. Saidboeva. "MAKTAB VA OILADA ESTETIK TARBIYANI SHAKLLANTIRISH JARAYONIDA O'QUVCHILARNING AKSIOLOGIK DUNYOQARASHINI RIVOJLANTIRISH." Inter education & global study 9 (2024): 114-121.
- 3. Jarasovna, Kurbanova Rita. "The Role of National Values in Shaping the Aesthetic Worldview of Schoolchildren." International Journal of Pedagogics 5.03 (2025): 55-58.
- 4. Jarilkapovich, Matjanov Aman. "USE OF PEDAGOGICAL METHODS BASED ON THE MODERN EDUCATIONAL PROGRAM TO INCREASE THE EFFECTIVENESS OF EDUCATION." European International Journal of Pedagogics 4.06 (2024): 26-33.
- 5. Jarilkapovich, Matjanov Aman. "Program Technology for Choosing an Effective Educational Methodology Based on Modern Pedagogical Research in The Educational System." CURRENT RESEARCH JOURNAL OF PEDAGOGICS 6.02 (2025): 30-33.
- Turemuratova, A. B. "TA'LIMDA PEDAGOGIK YONDASHUVLAR ASOSIDA O'QUVCHIYOSHLARNING KOLLOBORATIV KO'NIKMALARINI RIVOJLANTIRISH MEXANIZMLARI." Inter education & global study 3.4 (2025): 242-250.
- 7. Begibaevna, Turemuratova Aziza, Kenjayeva Marhabo Ahmatjonovna, and Jumaniyozova Nigora Baxtiyorovna. "Formation of Students' Collaborative Skills Through Group Training Based on Multi-Vector Pedagogical and Psychological

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- Approaches in Higher Education." International Journal of Pedagogics 5.04 (2025): 24-27.
- 8. Jarilkapovich, Matjanov Aman. "The Role of Modern Education and The Teacher's Pedagogical Skills in The Application of Pedagogical Teaching Methods." International Journal of Pedagogics 5.04 (2025): 266-268.
- 9. Turemuratova, Aziza, Shaxbozjon Rahimov, and Shohruh Abdullayev. "PSIXOLOGIYALIQ TRENIN'TIYKARLAWSHILERI HÁM OLARDIŃ ISKERLIGINDEGI USILLAR HAQQINDA ULIWMA MAĞLIWMATLAR." Modern Science and Research 4.4 (2025): 206-211.
- 10. Turemuratova, Aziza, Umidjon Amonov, and Ali Õrozboyev. "GENERAL INFORMATION ABOUT GESTALT THERAPY AND ITS BASIC PRINCIPLES." Modern Science and Research 4.4 (2025): 297-302.
- 11. Turemuratova, Aziza, Kamila Jaqsilikova, and Gulbanu Mamutova. "STUDENTLER TOPARLARINDA TRENIN'DI SHÓLKEMLESTIRIW QAĞIYDALARI HÁM PSIXOLOG-TRENERDIŃ SHESHENLIK SHEBERLIGI." Modern Science and Research 4.4 (2025): 194-200.
- 12. Turemuratova, Aziza, and Bauirjan Otebekov. "PEDAGOGIKALIQ METODLAR ARQALI OQIWSHILARDIŃ KOLLOBORATIV KÓNLIKPELERIN ASIRIW." Modern Science and Research 4.4 (2025): 239-244.