

THEORETICAL AND METHODOLOGICAL BASIS OF EMPIRICAL RESEARCH OF INDIVIDUAL STRESS RESISTENCE

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INTRODUCTION

The problem of study of stress resistance of the individual is extremely actual as high stress resistance ensures successful professional activity in extreme conditions, maintaining work efficiency and health of individual after influence of extreme environmental factors. Predicting human behavior in extreme conditions, determining the consequences of their impact and preparing adequate strategies of individual behavior in stressful conditions is significant for psychological support of specialists who perform professional duties in extreme conditions, and also for providing assistance to victims of emergencies and traumatic situations.

The aim of the article – on the basement of analysis of approaches to study of personal stress resistance and practical results of the research, present the conceptual foundations of structural and functional organization of the individual stress resistance.

The object of the article: to carry out theoretical analysis of approaches to the definition of stress resistance; substantiate the conducting of psychological diagnostics under the complex of direct and indirect indicators; characterize the conceptual basis of structural and functional organization of the individual stress resistance.

1. The basic material research

In scientific literature there is no clarity and accuracy in understanding the nature of stress resistance, and most of the authors use the term “emotional stability” as a synonym which mechanisms and nature are studied better. The terms which indirectly characterize stress resistance were proposed by A. Stolyarenko (extreme reliability, total extreme resistance); A. Maklakov (personal adaptive potential).

In a direct statement stress resistance is referred to as an individual's ability to maintain normal performance (K. Sudakov)¹;

¹ Sudakov K. V. Individualnaja ustojchivost k stressu. M., 1998. pp. 3–168.

necessary degree of adaptation to the effects of extreme environmental factors and occupation (V. Bodrov), as the capacity for social adaptation, for preserving meaningful interpersonal connections, ensuring the successful self-fulfillment, achievement of life goals, preserving performance ability, health preservation (G. Nikiforov)²; stress resistance characterizes the state of physical, emotional and mental exhaustion caused by long-term involvement in emotionally intense and meaningful situations (V. Ababkov, M. Perret).

According to Yu. Aleksandrovskii, A. Waldman, V. Lebedev, stress resistance – is a barrier of mental adaptation. Psychologists (L. Dyka, O. Konopkina, V. Morosanova, R. Sahiyev) consider human self-regulation to be the basis of stress resistance, which consists of certain chains (O. Konopkina) and stylistically diverse (V. Morosanova, R. Sahiyev, L. Dyka). Other authors (L. Merfy, R. Lazarus, S. Folkman, D. Amirhan, N. Sirota, etc) refer to this characteristic the various cognitive mechanisms caused by overcoming the stressor (coping mechanisms) and mechanisms of psychological defense mechanisms (H. Haan). Coping strategies are affected by locus of control (D. Rotter), the ethnic factor (L. Taukenova), higher nervous activity type (L. Sobchik), mental and physical illness (Ye. Chehlatyy, N. Syrota, V. Yaltonskyy). Stress resistance is compared with emotional resilience and ability to control emotions (Ye. Mileryan); the ability to cope with great pressure and successfully solve tasks in extreme situations (N. Danylova); ability to overcome the state of emotional excitement while performing complex activity (V. Marischuk); feature of temperament that allows to perform reliably target activities through optimal use of reserves of nervous and mental emotional energy (V. Plahtiyenko, N. Bludov), stable orientation of emotional experiences for their content to a positive resolution of problems (O. Chernykova); persistent predominance of positive emotions (A. Olshannykova); integrated personal feature, characterized by such interaction of emotional, volitional, intellectual and motivational components of human mental activity that provides optimal goals achievement of in difficult emotional situation (P. Zilberman).

The main difficulties in determining human stress resistance are connected with assessing the specific of manifestations of personal reactions to psychological factors. The criteria of stress resistance to the stressors of physical or chemical nature (high or low temperature,

² Psihologija zdorovja / pod red. G.S. Nikiforova. SPb : Piter, 2003. 607 p.

physical stress, toxins, etc.) are determined, but to do so in relation to psychological stressors is much more difficult task. It is connected with different values, attitudes, needs, association reflexes and experience of people (V. Ababkov, M. Perret, J. Shcherbatykh, V. Marischuk).

The system of scientific concepts allowed to specify the understanding of stress resistance of personality, which, in our view, was considered from the perspective of internal and external determinants and its social, typological, personal characteristics with adequate strategies for stress overcoming.

So, if the conceptual content of the term "stress resistance" in the vast majority of scientific works regarded today mainly as a manifestation of post-traumatic stress disorder, reliability of activity, adaptation, in this study the searching mostly confined to structural components and functional elements, is conceived as a structural dynamic, functional feature of the individual.

Thus, the term stress resistance is mainly considered as a state of physical, emotional and mental exhaustion, the capacity for social adaptation, ensuring the successful fulfillment, achievement of life goals, preserving performance ability and health, the effects of stressful situations that lead to maladaptive or psychosomatic disorders. Insufficient study of stress resistance problem and its actuality in modern conditions of life requires new approach to the definition of its nature, structural elements, features, diagnosis and formation.

Generalization of available material enabled the author to present a holistic view of stress resistance due to its structural components and functional elements in its conceptual aspects on the basis of constructing an integrated systematic approach to understanding of stress resistance.

Generalization of available material concerning the definition of stress resistance identified on the semantic level as a multi-concept, although for interpretation and understanding its contents, in our opinion, the full definition has not been done yet.

Substantiating the complex of techniques for the study of stress resistance of personality we proceeded from the fact that stress resistance has structural elements with different levels of organization. During the test we used the regulated mandatory set of computer diagnostics methods for selecting experts to work in extreme conditions, we have added some techniques according to defined structural components of stress resistance. Such complex of studied variables allows not only to identify individual structural components

but also to clarify the functional role, the contribution of individual stress regulation and argue the integrative role of stress resistance. We substantiated the carrying out of psychodiagnosis of stress resistance on a set of direct and indirect indicators.

The level of stress resistance was measured by direct indicators of techniques that determine self-esteem of stress resistance, the level of stress resistance, vegetative manifestation of stress, a comprehensive assessment of stress, behavioral strategies for overcoming stress.

The study of indirect indicators, considered as manifestations of stress resistance in motivational, personal, social and behavioral spheres, should be done with the help of informative indicators of techniques aimed at understanding mental states, locus of control, the level of self-esteem, volitional qualities, level of activity, volitional self-regulation, situational and personal anxiety, maladaptive behavior and individual psychological characteristics: self-esteem, level of aspiration, motivation for professional activity, achievement motivation, motivation of approval, features of the nervous system. The study of primary (basic) stress was carried by the methods of evaluating the functional characteristics of the nervous system, that were conducted in conditions of intense sound and light effects.

On the basis of analysis of theoretical, methodological and empirical research we found out the conceptual foundations of structural and functional organization of the individual stress resistance. We consider stress resistance as structural-functional, dynamic, integrative quality of the individual as a result of transactional collision process between individual and stress factor, including the process of self-regulation, cognitive representation, objective description of the situation and requirements of the individual. Adequate assessment of the situation and personal resources determine the intensity of reactions directed by personality to change components of stressful situation, changing cognitive representations, attitude, motivational, willing orientation, coping behavior. They are carried out through a central function of cognitive-phenomenological perspective and functions of separate structural components that determine the level of stress resistance. Stress resistance of personality provides efficiency and reliability of activity, mental and physical health of the individual during and after traumatic events.

Stress resistance of the personality is formed on the basis of frequent clash with stress factors. This clash manifests in a complex process that includes evaluation of stressful situation, regulation of activity in stressful conditions, coping behavior, the impact on the individual of traumatic events and working out a traumatic experience. Stress resistance as

integrative quality of the individual involves interaction with all structural characteristics of mentality both during and after the exposure of stressful factors. The key components of the stress resistance of individual are social, typological and behavioral factors.

This multi-level approach to the study of structural components of stress resistance gives reason to think not only about the levels of stress resistance, their subordination and ratio, but also about the specificity of their functional roles, enabling arguing stress resistance as integral, structural-functional, dynamic characteristic.

Individual features of stress resistance are determined by typological factor (level of primary stress resistance) and mediated by its effects on the behavior and activities in extreme conditions. Typological factor causes nervous system functional mobility, endurance, performance and reliability that are the basis of individual stress resistance and interact with its other structural elements.

The process of gaining experience in coping with stressors, achieving new goals can promote formation of personal, social and behavioral components of stress resistance. This is connected with tranquility, confidence, will self-control, professional skills motive, motive of achievement, general internality, willingness to work, assertive actions, activity, social incline, search of social support, joining the social contact.

Functional development of separate structural components causes stress resistance level of the person. Thus, the functional role of the personal factor, in our view, aimed to development of self-assessment processes, personal capability and stress provoking situation. In general, the functional role of personal self-conscious individual stress resistance regulation – is to control goals setting and goals achievement that is obviously adopted by the subject, to control the interaction of the subject with the world, emotional and cognitive perception, assessment, attitude.

The level of development of individual functions of integrated stress resistance system depends on peculiarities and intensiveness of factor components. The results of our studies showed that a high level of motivation forms a harmonious, high stress resistance profiles of personality. Social function generally expressed in the tendency to overcome obstacles, ensuring a high level motivation sphere, orientation to achieve the intended objective and subjective goals, achieve the highest possible outcome.

The function of behavioral component is reduced to a mature and effective types of coping strategies. However, it should be noted that holistic system of stress resistance operates within 4-factor structural

elements with a possible weakening or strengthening of some of them or as a regular change of ratio between strong and weak functional components in the structure of dominant typical profile.

We concern stress resistance of the individual through three focused interrelations: cognitive representation of a stressful situation and own ability to overcome it, the objective characteristics of the situation and the objective requirements that define adequate control over stress and determine the subjective and objective functional efforts to resist stress and overcome its negative effects.

Consequently, stress resistance of personality includes the following features: the ability to adequacy of cognitive representation of stressful factors, the ability to analyze and link the perception of the real characteristics of the stressor with functionally adequate responses; availability of appropriate effective convictions or professional rules of conduct (as the realization processes are included in the range of ways to respond); availability of feedback on subjective and objective efficiency of coping.

Thus, adequate cognitive representation, objective characteristics of situation and awareness of objective requirements lead to control over stress and determine the appropriate subjective and objective functional efforts to resist and overcome the negative effects of stress.

The basis of the stress resistance is initial stress resistance which we define as its biological component, which includes the full range of functioning characteristics of brain: emotional tone, endurance, accuracy, functional mobility, reliability, basic characteristics and features of the basic neural processes, the level of activation, complex constitutional genetic, physiological, endocrine and other systems which ensure adequate and stable functioning under stressful conditions.

The level of initial stress resistance of the individual depends on the functionality of the basic features of the nervous system, which are defined by its functional mobility, endurance, reliability and lability of the basic nervous processes.

Initial stress resistance affects the overall level of stress resistance. The higher initial stress resistance, the higher is probability of normal body functioning and operation efficiency while increasing the intensity of the impact of stressful environmental factors. The higher rates of initial stress resistance, the more person can successfully perform professional duties in the harsh conditions of extreme environmental factors.

Initial stress resistance significantly affects the overall level of stress resistance. However, its personal, social and behavioral

components and properly organized external influence may, to some extent, compensate the weaknesses of nervous system characteristics.

Although stress resistance depends on its typological factor, crucial importance in the formation of stress resistance belongs to personal, social, behavioral and training components as evidenced by analyzing the literature and own empirical research.

Stress resistance of individual is multidetermined. High level of stress resistance is caused by tranquility, self-confidence, lack of shyness, low level of personal anxiety, will self-control; characteristics of motivational sphere – motive of social significance of labor, professional skills, achievements; high internal locus of control level, willingness to work.

Stress resistance as an integral characteristic of mental development formed in the course of human ontogeny through genetically conditioned individual characteristics. Initial stress resistance is that base on which external influences are formed and transformed through. On the basis of our research, the most important is the speed of information processing, lability of nervous processes, reliability, endurance, precision and performance activity.

The key strategies of stress overcoming that determine stress resistance are assertive actions, activity in interaction, social incline, personal activity, search for social support, joining the social contact. Stress resistance is determined by individual psychological training for actions in extreme conditions, personal and professional experience, support of social environment, efficient working out of traumatic experience.

Stress resistance is caused by individual firm positive beliefs about the outside world and personal "Self". Working out of traumatic experience prevents the destruction of personal beliefs, contributes to stability and conservation. In other words, the resources for stress resistance are positive basic beliefs about the world, personal "Self" and the experience that fosters "Self" – Concept of personality.

CONCLUSIONS

Thus, we consider stress resistance as a structural-functional, dynamic, integrative quality of the individual as a result of transactional collision process between individual and stress factor, including the process of self-regulation, cognitive representation, objective description of the situation and requirements of the individual. Adequate assessment of the situation and personal resources determine the intensity of reactions directed by personality to change components of stressful situation, changing cognitive

representations, attitude, motivational, willing orientation, coping behavior. They are carried out through a central function of cognitive-phenomenological perspective and functions of separate structural components that determine the level of stress resistance.

Stress resistance of personality provides efficiency and reliability of activity, mental and physical health of the individual during and after traumatic events.

The prospect of further research is in the study of stress resistance characteristics of entrepreneurs during the crisis period of society development.

SUMMARY

The article is devoted to theoretical, methodological and practical results of research aimed at solving urgent problem of our time – stress resistance of personality. On the basis of theoretical approaches and research results we revealed stress resistance psychological content, its structural components, functions, determinants, proved the expediency of stress resistance psychodiagnosis for informative direct and indirect indicators. We consider stress resistance as structural-functional, dynamic, integrative quality of the individual as a result of transactional collision process between individual and stress factor, including the process of self-regulation, cognitive representation, objective description of the situation and requirements to the individual.

Adequate assessment of the situation and personal resources determine the intensity of reactions directed by personality to change components of stressful situation, changing cognitive representations, attitude, motivational, willing orientation, coping behavior. They are carried out through a central function of cognitive-phenomenological perspective and functions of separate structural components that determine the level of stress resistance. Stress resistance of personality provides efficiency and reliability of activity, mental and physical health of the individual during and after traumatic events.

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