

Personal Resources of the Professional's Stress Tolerance

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Abstract

Background and Purpose: The investigation is dedicated to the study of personal resources of stress tolerance in work activities by the example of the medical workers. **Materials and Methods:** As a resource of stress negotiation in complex professional situations happened with the specialists of different age groups, we consider person vitality as a complex structured psychological formation, system of persuasions which contribute to the development of readiness to manage the situation of increased complexity and system of life guidance. **Results:** These inside criteria are important for the life prosperity, process orientation, result of activity, and feeling of being an origin of professional development. We analyzed coping strategies for the control of professional situations, used in the professional activity. During the experimental research, we identified the specific character of doctors' stress tolerance, concerned with a high professional motivation, self-confidence as a professional, which can prevent the professional burnout. Along with this fact, high activities of depersonalization in combination with non-productive coping strategies reveal the problems with patients' interaction. During the investigation, we revealed that the respondents (medical workers of children's polyclinic) have both the high activities of managerial stress receptivity and the high activities of vitality, caused by drawing in labor activity and feeling of control under what is going on at present, ability to risk in professional situations. **Conclusion:** The revealed connection of personal characteristics and components of stress tolerance display that they can be as a resource of stress tolerance.

Key words: Effective strategies of human behavior in stressful situations, life guidance, professional burnout, stress tolerance, vitality

INTRODUCTION

Personal resources of control with professional stress are the subject of research in modern psychology. There are a number of the most important problems in this sphere: The creating of phenomenological model of stress, three-factor model of professional burnout, and investigation of control behavior model. The investigations of vitality phenomenon as a global personal characteristic and resource of stress control, which are surveyed in the course of resource approach in personal psychology, are of great interest (e.g., works of Maddi^[1] and Leontiev and Rasskazova^[2]). The studies of vitality as a resource for coping with stress and professional burnout among medical staff are of particular importance to us.^[3,4] The works by Leontiev and Rasskazova,^[2] Kitaev-Smyk,^[5] and others

are devoted to the personal resources' search of stress tolerance.

The increasingly complex conditions of modern life with the increasing demands to the human as a person and as a professional trigger specific psychological mechanisms not only able to compensate for the effect of professional stress but also to develop, increasing their competitiveness. The psychological phenomenon of vitality, which is presented and grounded in the concept of Maddi^[1] and actively developed

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today in the psychological literature,^[2,6] refers to these internal mechanisms of personal and professional development.

In our paper, we will monitor the relationship of personal vitality with sense, motivational, and value structures, features of coping strategies, and analyze it as the ability to be a resource of stress and professional burnouts' negotiation by the example of medical workers.

The phenomenon of professional burnout is examined in close connection with the concept of stress tolerance. Despite the significant problem of professional burnout and the fact that it has sometimes fatal consequences not only for the specialist in sphere "human-human" but also for the human, this specialist work with, in psychology, there is no common conception of this phenomenon essence; its structure and features of display are not adequately explored in representatives of different professions. We rely on the definition, according to which during burnout, the attention is emphasized on the physical, emotional, and mental devastation; emotional devastation, depersonalization, and reduction of professional achievements are distinguished as its components.^[7]

Among the external factors of professional burnout of medical workers, we can distinguish the stiffness of requirements for professional competence, a high degree of responsibility for the life and health of patients, the negative emotions emanating from a number of patients, and difficult working conditions (high intensity, poor wages, unequipped workplace, etc.). Among the internal factors, we can distinguish emotional and behavioral characteristics of the specialists. One of the inner resources is vitality - the system of human convictions concerning himself, other people, and the world on the whole, which allow to control any stress situation effectively.^[8] Psychological structure of vitality, according to Maddi,^[1] includes involvement in the activity, control under situation, and acceptance of risk. Vitality is the internal "shock absorber," which allows to overcome the uncertainty and anxiety which are inseparably linked to the stress.^[9]

According to the classification of Shafranov,^[10] the profession of medical worker can be attributed to the professions of the highest type, since it is, in addition to a high level of depression, implies systematic reflection and continuous self-development. Taking this fact into consideration, the research of personal determination of stress tolerance, as well as the search for personal resources of vitality of the professional, is important for creating preventive measure programs of professional burnout syndrome.

Aim of investigation

The aim of this study is to reveal personal resources in negotiation of complex professional situations.

Hypothesis of investigation

Personal characteristics such as vitality, resistant life guidance, and effective coping strategies can be as a resource for negotiation of professional burnout and promote stress tolerance of the professional.

METHODOLOGY OF INVESTIGATION

The following works were considered: Questionnaire "Professional burnout" Maslach and Jackson, adopted by Vodopyanova, Starchenkova, the scale of organizational process by Macklin (Russian-speaking adaptation by N. Vodopyanova),^[11] the test of vitality by Maddi, adopted Leontiev and Rasskazova,^[2] and the scale of "Strategy of negotiation of stress stations" by Hobfall, adopted by Vodopyanova and Starchenkova,^[11] as a statistical technique, the Pearson correlation coefficient has been applied to the SPSS-15 Program. The sample consisted of 60 doctors 23-65 years old, working in the day hospital.

RESULTS AND DISCUSSION

At the first stage, we studied the features of professional burnout and characteristics of stress tolerance among medical workers [Figure 1].

In the picture, we can see that the respondents of the given sample have the high index of professional motivation (36.39, σ - 8.22), which prevent psychological burnout. They feel pleasure in their professional activity and are self-confident as professionals, which help them to strive against the stress. However, we can establish that in the given sample, there is a high level of depersonalization and personal removal (12.51, σ - 5.47); furthermore, we have the display of negative relationship to patients, critical relationship to the people around, noncriticality in their self-estimating, and high level of their importance of rightness. These data, including the fact that the index of psycho-emotional devastation is on the medium level (21.14, σ - 10.95), are the professional burnout markers of respondents of this group.

Measurement of tolerance to organizational stress showed that 50% of respondents have the high susceptibility to

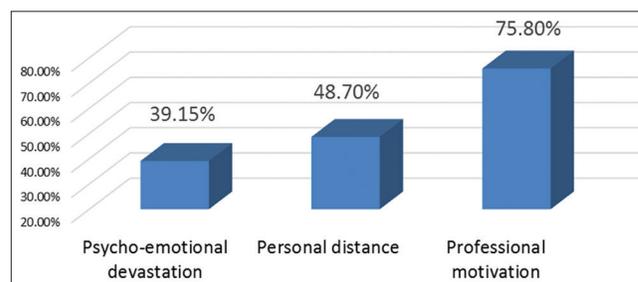


Figure 1: Index of emotional burnout

organizational stress and predisposition to behavior “type A” (perfectionistic focus by Friedman). 43.48% have a medium level of susceptibility to organizational stress. Apparently, medical workers are quite sensitive to organizational stress, and low tolerance to stress is only 6.52% of them. The results of the comparative analysis of the severity of susceptibility indicators to organizational stress among the respondents of this sample are shown in Figure 2.

The respondents experience the greatest susceptibility to stress in situations that require flexibility of behavior, the width of his interests, and when the need arises for professional or personal reflection. Perhaps, this is due to the increase of anxiety associated with self-esteem and perception of assessment of others in these situations. Thus, we have identified the peculiarities of stress and professional burnout among medical workers. Let’s consider the internal mechanisms that allow them to cope with difficult professional and life situations.

According to the method by Maddi,^[1] a study of respondents’ vitality showed that its intensity is slightly higher than the average normative values (31.2). In this sample, vitality is enhanced through involvement in activities (36.72) and control under situation (of 29.14), which give a sense of confidence and help to cope with stress. The strategy of risk taking is less pronounced (26.5). Respondents hardly give up comfort and security in favor of the opportunity to acquire experience and additional knowledge.

Respondents adhere prosocial and passive strategy, not so much overcoming difficult situations, as an adaptation to them. Furthermore, there are strategies directed to change your emotional condition using informal communication, the search of social support.^[3] Perhaps, this collegiality helps to avoid medical errors, diagnose more accurately, and choose more adequate treatment methods. In addition, this group clearly revealed the indicators of control of impulsive behavior and careful steps. Possibly, this index is typical for employees of children’s medical institutions, where the responsibility for the health and life of a child is high. A strategy of avoidance has low values, which, obviously, characterizes the responsible position of a doctor, his involvement into the situation. Antisocial actions are least peculiar to them.

In the course of correlation analysis of vitality indicators, susceptibility to stress, and strategies of behavior in stressful situations, we obtained the following results [Table 1].

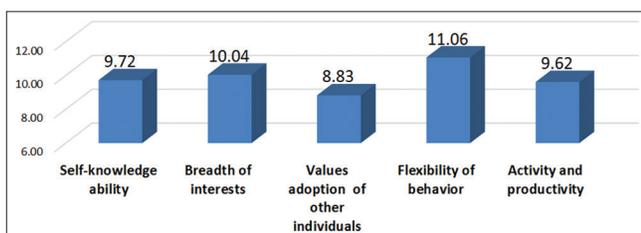


Figure 2: Index of susceptibility to organizational stress

Research of interrelation of professional burnout with the personal characteristics of the respondents displayed that the index of emotional devastation has a positive correlation with low-stress tolerance, stiffness, and behavior reactivity (which is natural). At the same time, the negative correlation is recorded with all indicators of vitality and sense of life. According to the scale of emotional devastation, high values negatively correlate with assertive and indirect manipulative actions.

These data demonstrate that the experts, “sated with” work, characterize by a lack of flexibility in behavior, low activity in relation to surrounding events, likely to experience indifferent feelings in relation to professional activities, have doubts that they can control the events and poorly comprehend the relationship of the past, present, and future events.

The rate of depersonalization is positively correlated with rejection of the values of others and antisocial actions, while negatively related to the overall vitality, involvement, and risk taking. There is an evident negative correlation between depersonalization and awareness of the process and efficiency of life, which is understandable. We can say that health workers perform their duties formally, without the experience of personal involvement, tend to ignore the value of other people, so interacting with them can even resort to antisocial actions. They do not have personal involvement in the performed activity and are afraid of a new experience and related feelings, poorly aware of the contents, and results of lived lives.

The scale of “professional motivation” has a positive correlation with all indicators of vitality and sense of life (except the indicator of “purpose of life”) and negatively correlates with stress tolerance, width of interests, activity, manipulative and antisocial actions. We see that the reduction of professional achievements is hampered by the involvement in the running activities, the ability to control the events, and the readiness to accept new experiences, despite the risks involved. However, experts negatively assess their professional achievements, probably because of the narrowness of interest and passive attitude to the environment, have weak resistance to stress, and tend to react to it with straight and antisocial actions.

Analysis of the characteristics of stress tolerance and personal qualities of physicians allowed to determine those that can serve as resources in difficult professional situations [Table 2]. It should be noted that significant correlations for most of the studied parameters were obtained according to the criterion of stress tolerance (instability) and such component as “activity and productivity,” suggesting that the active position of the professional gives him the opportunity to overcome professional difficulties.

Table 2 shows that the indicators of total exposure to stress negatively correlate with all indicators of personal vitality.

Table 1: Analysis of correlation of personal characteristics and indicators of professional burnout in medical workers

| Personal characteristics | Indicators of professional burnout | | |
|---|------------------------------------|-------------------|-------------------------|
| | Emotional devastation | Depersonalization | Professional motivation |
| Low stress tolerance | 0.64** | | -0.66** |
| Narrow-mindedness | | | -0.37* |
| Non-acceptance of life values of others | | 0.40* | -0.45** |
| Behavioral stiffness | 0.41* | | |
| Reactivity and non-productiveness | 0.67** | | -0.79** |
| General vitality | -0.59** | -0.50* | 0.70** |
| Involvement | -0.59** | -0.62** | 0.65** |
| Control | -0.46* | | 0.73** |
| Risk taking | -0.50* | -0.43* | 0.42* |
| Acceptive actions | -0.45* | | 0.48* |
| Indirect manipulative actions | -0.37* | | -0.45 |
| Asocial actions | | 0.46* | -0.46 |
| General index of life guidance | -0.63** | | 0.62** |
| Aims | -0.41* | | |
| Process | -0.74** | -0.41* | 0.65** |
| Result | -0.56* | -0.41* | 0.73** |
| Locus-control Me | -0.48* | | 0.43* |
| Locus-control life | -0.59** | | 0.56** |

* $P \leq 0.05$; ** $P \leq 0.00$ **Table 2:** Correlation of personal characteristics and indicators of stress tolerance

| Characteristics | General stress susceptibility | Lowered activity and productivity |
|--------------------------------|-------------------------------|-----------------------------------|
| General vitality | -0.65** | -0.76** |
| Involvement | -0.58** | -0.70** |
| Control | -0.61** | -0.67** |
| Risk taking | -0.54** | -0.63** |
| General index of life guidance | -0.52* | -0.68** |
| Life goal | | -0.40* |
| Process | -0.54* | -0.68** |
| Result | -0.64** | -0.76** |
| Locus-control Me | -0.40* | -0.59** |
| Locus-control life | -0.48* | -0.60** |
| Assertive actions | -0.40* | -0.45* |
| Indirect actions | -0.40* | -0.42* |
| Asocial actions | -0.38* | -0.46* |
| Impulsive actions | | -0.40* |

* $P \leq 0.05$; ** $P \leq 0.00$

This suggests that resilience is an important resource of coping with stress and is evidence of the active position, the ability of the individual to control the situation and their emotions in it, confidently to overcome professional difficulties. The

presence of significant relationships for medium and high power with indicators of life guidance allows to assert that the fullness of life with personal meanings, existence of important goals, the ability to get joy from executable activities, and understanding their professional boundaries and opportunities decrease the level of depression, and by contrast, the disengagement, the meaninglessness of work, and lack of deep personal involvement in it affect the personality of a professional. It is interesting to note that out of the coping strategies, what are related to stress, there were found the strategies of passive and asocial coping with the fact that the most prominent positions in the structure of coping strategies are the strategies, that aimed to the search of social support and establishment of social contacts. We can assume that we expressed earlier the idea that doctors are missing a flexible system of multilevel strategies and a variety of strategies for coping, adequate to the exigencies of the situation, and its own capabilities^[4] were confirmed. This suggests that in the absence of productive coping strategies of coping with stress, doctors are relying on personal qualities such as vitality and pronounced semantic content of activities.

CONCLUSIONS

Indicators of stress tolerance and emotional burnout of medical workers have specifics, related to the stressful and responsible nature of their employment. High exposure to

stress leads to burnout, which manifests itself in emotional devastation, especially in depersonalization - the direction of negative emotions to the patients, which is confirmed by the selection of antisocial coping strategies as reactions to the stress and leads to violations of communication. Despite the high susceptibility to stress, the doctors maintain high professional motivation, and their work is filled with personal sense and is followed by self-confidence as a professional.

A passive strategy of coping with stress, low-intensity indicators of constructive coping strategies lead to the chronic current of stress, indicates the absence of an effective system of emotional response of physicians in difficult professional situations and requires active psychological and pedagogical support.

Resilience as an integral characteristic of personality has a relationship with stress and positively affects the reduction of professional burnout of medical workers. Involvement in activities, as well as the ability to control complex professional situations, to take risks, increases stress and can act as a resource of coping with stress. Conscious life guidance, being negatively related to the rate of reduction of professional achievements, plays the role of motivator, encouraging to search for constructive strategies of behavior in stressful situations.

REFERENCES

1. Maddi SR. Relevance of hardiness assessment and training to the military context. *Mil Psychol* 2007;19:61-70.
2. Leontiev DA, Rasskazova EI. Test of Resilience. Moscow: Smysl; 2006.
3. Fomin IV, Fomina NV, Fedoseeva TE. The attitude of doctors and patients to the treatment of the disease as a social and psychological problem (on the example of treatment of arterial hypertension). *Bull Univers Min* 2016;2:121-7. Available from: <http://www.vestnik.mininiver.ru/upload/iblock/5aa/fomina.pdf>. [Last access on 2017 Apr 30].
4. Fomina NV, Shabanova TL. Features of coping behavior in the specialists of the socionic sphere: The resource of overcoming or the source of chronic stress. *Mod Res Soc Probl* 2015;5:514-23. Available from: <http://www.science-education.ru/95-4569>. 4569. [Last access on 2017 Apr 30].
5. Kitaev-Smyk LA. Burnout of personnel. Burnout of personality. Burnout of the soul. *Psychopedagogy in law. Enforc Agencies* 2008;2(33):41-50.
6. Fominova AN. Life-Sustaining Personality. Monograph. Moscow: Moscow State Pedagogical University; 2012.
7. Orel VE. Syndrome of Mental Burnout. Myths and Reality. Kharkov: The Humanitarian Center; 2014.
8. Fomina NF, Fedoseeva TE. Investigation of indicators of resilience in the aspect of a professional person. *Mod Probl Sci Educ* 2016;6:1-24. Available from: <http://science-education.ru/en/article/view?id=25947>. [Last access on 2017 Apr 30].
9. Tillich P. The Courage to be. In: *Selected Works: Theology of Culture* (7-131). Moscow: Yurist; 1995.
10. Shafranov SA. Automating element of work as a criterion for classifying professions. *Hyg Lab* 1924;6:587-90.
11. Vodopyanova NE, Starchenkova ES. Burnout syndrome: Diagnosis and Prevention. St. Petersburg: Piter; 2008.

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