GENERAL PSYCHOLOGY, PERSONALITY PSYCHOLOGY

Research article UDC 159.923 https://doi.org/10.21702/rpj.2023.2.11

Personal Predictors of Stress Resistance of Healthcare Professionals

Bela A. Yasko^{1,2}^(D), Lyudmila S. Skripnichenko^{1*}^(D), Sergey N. Strikhanov²^(D), Diana D. Tedoradze¹^(D)

¹ Kuban state university, Krasnodar, Russian Federation
 ² Kuban state medical university, Krasnodar, Russian Federation

* Corresponding author: <u>lud-skr@mail.ru</u>

Abstract

Introduction. The article explores the problem of personal predictors of stress resistance of medical workers - subjects of clinical activity, insufficiently studied in the context of the predictor role of personal potential and its significant psychological education dispositional optimism. The purpose of the study: to identify the relationships of optimism, properties that form personality adaptability, and neuropsychiatric resistance to determine the predictor role of the components of personal potential in the stress resistance of subjects of clinical activity. Methods. Applied: "Boston Stress Resistance Test", C. Scheyer and M. Carver optimism test, personality social adaptability questionnaire. Sample: doctors and nurses of medical and preventive institutions in Krasnodar (85 people). Statistical analysis was performed using methods of parametric, multifunctional and multivariate statistics in the SPSS-26 environment. Results. Subjects have a medium-high level of stress resistance, with high stress resistance prevailing among nurses (p < 0.05), and normal (medium) - in physicians (p < 0.01). The «positive expectations» indicator at the "high" and "above average" levels is set at 67,0%, and the «negative expectations» indicator is set at 33,0% of subjects. Adaptability is based on reduced creativity with an average level of conformity and lability. K-mean cluster analysis with inclusion of analysis of variance identified three clusters of different volumes. The first is the largest (55,3% of respondents); stress resistance corresponds to the normal range, and optimism is based on positive expectations. In the other two clusters, weak and very weak stress resistance is recorded during activity in the structure of optimism of the «negative expectations»

disposition. The properties of social adaptability remain unchanged under different manifestations of stress resistance. **Discussion.** Three types of stress resistance caused by different disposition indicators of optimism are statistically justified among healthcare professionals. The first type – "Optimistic stress resistance", is based on the predominance of positive expectations. The phenomenon of reduced optimism established in two other clusters acts as a predictor of weak stress resistance of medical professionals and can be generalized as the "Type of alarming negative expectations".

Keywords

adaptability, disposition optimism, conformity, creativity, lability, personality potential, healthcare professionals, stress resistance

Funding

The research is carried out with the financial support of the Kuban Science Foundation in the framework of the scientific and innovation project Num. NIP-20.1/22.36.

For citation

Yasko, B. A., Skripnichenko, L. S., Strikhanov, S. N., Tedoradze, D. D. (2023). Personality predictors of stress resistance of healthcare professionals. Russian Psychological Journal, 20(2), 169–184. https://doi.org/10.21702/rpj.2023.2.11

Introduction

The search for psychological resources of adaptation to changing living conditions, the preservation of emotional stability in the growing risks of technogenic, biogenic, sociogenic threats of the modern world today, without exaggeration, can be attributed to the most pressing problems of research in the human sciences. A lot of psychological research is devoted to the isolation of factors affecting the development of maladaptation states, and a significant part of them reveals the phenomenology of stress as a "trigger" of this process. A special object of analysis in a number of studies is the personality of a medical worker as a subject of professional activity, stressogenic in terms of the content of basic labor functions (Ilyasova, Farakhyanova, 2016; Soboleva, 2018; Pustashieva, 2017; Shadrina, 2019; Lambert et al., 2007; Abdollahi, Abu Talib, Yaacob & Ismail 2014; Rivera, Shapoval & Medeiros, 2021). Thus, in the materials presented by L. Sh. Kravchenko and Sh. U. Akhmedova (2017), it was shown that weak stress resistance leads to a decrease in the professional motivation of medical workers, to the manifestation of apathy, a negative attitude towards professional activity. In the studies of A. B. Rogozyans, on the

GENERAL PSYCHOLOGY, PERSONALITY PSYCHOLOGY

example of the personality of a doctor, the concept of an individual style of overcoming stress is substantiated, which the author considers as "a stable set of psychological means activated by the personality to overcome stressful situations and ensure the stability of the optimal level of mental stress, the preservation of holistic personality and authenticity of the personality" (Rogozyon, 2012, p. 2; Rogozyan, Yasko, 2012).

In analyzing the role of stress resistance in the process of coping with threats to the preservation of the integrity, authenticity of the person, the concept of personal potential, which defines this phenomenon as an integral characteristic of the level of personal maturity, which reflects the «measure of overcoming the given circumstances by the person» (Leontiev, 2011b, p. 7). Self-realization in social reality, resilience, openness to professional changes, a high level of personal maturity - distinctive features of the owner of a high level of personal potential formation (Leontiev, 2007, 2011a, 2011b; Yelnikova, Pronina, Faustova, Komlik, 2022; Yasko et al., 2021). Note that in a number of meaningful publications, works devoted to the analysis of the phenomenon of resilience are noticeably distinguished (Yelnikova et al., 2022; Makhnach, 2020; Tolochek, 2021, Fedotova, 2020; Yasko et al., 2021; Schwarz, 2018; Southwick, 2018, et al.)

In studies of different authors, some components of personal potential are noted: wisdom (Leontiev, 2011b); optimism (Gordeeva, 2010, 2011, 2018); adaptation to difficult life situations (Alexandrova, 2011); ability to withstand stress (Rasskazova, Gordeeva, 2011). Among these qualities of higher substructures of personality, adaptability stands out - an integral property determined by the correspondence/inconsistency between the goals, aspirations of the personality and the results achieved by it (Ermine, Titarenko, 2001, p. 9). Describing the psychological mechanisms of human adaptation, V. A. Bodrov assigned a special place to the roles of personal factors, including resistance to external influences, stressors of different etiologies (Bodrov, 2007, p. 58).

Personal potential includes a complex education defined as optimism - the ability to think constructively, positively assess your future, act purposefully and resist the impact of difficult life circumstances, preserving psychological well-being, show resilience and adaptability (Gordeeva, 2011, p. 131). In modern psychology, two main concepts of optimism have developed (Ilyin, 2015). One of them is based on the theory of positive psychology and attributive style (Seligman, 2006; Abramson et al., 1989; Abramson, Seligman, Teasdale, 1978; Luthans & Broad, 2022). On a variety of data, researchers have shown that optimists explain negative events as unstable, caused by external causes, pessimists in contrast, as stable, global related to internal causes (Peterson, 2000). It is noted that people with a pessimistic attributive style are prone to mental status disorders, to depression (Abramson, Metalsky, Alloy, 1989; Alloy, Kelly, Mineka, Clements, 1990).

In line with dispositional theories of personality, the concept of M. F. Scheyer and C. S. Carver (Carver et al., 2010; Scheier et al., 2001; Brissette, Scheier, Carver, 2002). It treats optimism as a dispositional construct and interprets it in the context of expectations. Optimism is the positive expectation of the individual regarding the results of his activities;

pessimism, in contrast, is characterized by negative generalized expectations of man regarding the future (Carver et al, 2010). Speaking of optimism/pessimism, C. Carver and M. Scheyer imply a generalized sense of doubt or confidence about the positive or negative outcome of achieving life goals. Studies of the phenomenology of dispositional optimism in domestic psychology are presented in various scientific publications that significantly complement and expand this construct (Sychev, 2010; Tsiving, Evnina, 2013; Gordeeva, Sychev, Osin, 2010). In particular, Russian-language versions of the diagnosis of optimism as a style of explaining success and failure (STONE questionnaire), as well as the disposition optimism test (LOT) (Gordeeva et al., 2009, 2010) became a significant contribution to the methodology of scientific search.

Numerous studies have made it possible to call dispositional optimism a significant predictive indicator of subjective well-being. Individuals with high optimism are not inclined to develop anxiety and distress, the positive perception of the activity performed does not allow them to experience strong negative emotions leading to mental overload. Optimists, faced with difficulties, demonstrate the ability to positively reformulate the problem. An analysis of optimist copying strategies showed that they more often than pessimistic-oriented subjects use constructive ways of coping (planning, positive reassessment, search for emotional and social support) and less often turn to non-constructive strategies for avoiding and avoiding the problem (Enikolopov, Petrova, 2009; Zaitsev, 2012; Gordeeva, Lunkina, Sychev, 2018).

The considerable activity of researchers in the field of personal potential issues leads to the actualization of the problem of its predictor role in ensuring the stress resistance of subjects of professional communities exposed to the risks of vital threats arising in the process of activity, in particular, medical workers. In the empirical search, we formulated a hypothesis: in medical professionals, dispositional optimism plays a predictor role in ensuring stress resistance. The **hypothesis** determined the **purpose of the experimental study**: on a sample of medical professionals to identify the relationships of optimism, properties that form personality adaptability, and neuropsychiatric resistance to determine the predictor role of the components of personal potential in the stress resistance of subjects of clinical activity.

Methods

An empirical sample was made up of 85 medical workers of various medical and preventive institutions in Krasnodar (doctors, 52 people (Group n1); nurses, 33 people. (Group n2)). Applied: «Boston stress resistance test» (Shcherbatykh, 2006), Optimism Test by C. Sheyer and M. Karver (Sychev, 2008), social personality adaptability questionnaire (Posypanov, 2002).

The purpose of the «Boston stress resistance test» is to determine an individual's vulnerability to stress. The technique was developed by researchers at the University of

Boston Medical Center, adapted from a Russian-language sample of Yu. V. Shcherbatykh. The result obtained in testing determines one of the levels of stress resistance: high (from 0 to 10 points); normal (31 to 50 points); weak (more than 50 points).

The optimism test of C. Scheyer and M. Carver is based on the concept of dispositional optimism. It allows you to determine the predominant attitude of the personality to everyday or difficult life situations. The results are determined by two scales: «positive expectations» and «negative expectations». People with high levels of optimism see desired outcomes as achievable, and people with low levels of optimism are more passive to their desires. When processing results, the following levels of optimism are determined: high (22 points or more); above average (19-21 points); below average (17-18 points); low (16 or less).

The conceptual basis of the methodology «Questionnaire of social adaptability of personality» by O. G. Posypanov is the provision on social adaptability as a complex property of personality (Posypanov, 2002). As part of this complex, three properties are distinguished that form the main scales of the guestionnaire: «adaptability - conformity» (Kn), «adaptability – lability» (Lb), «adaptability – creativity» (Kp). The questionnaire contains 25 statements (8 statements on each scale), one of which (approved. no. 9) gives reason to consider the effect of the effect of social desirability in the analysis of individual results. The match of the answer with the «key» is estimated at 1 point, so the maximum score on each scale is 8 points. The author proposes to consider five options for «profiles» of social adaptability, depending on the ratio of the levels of severity of indicators for each of the scales: the «profile» of the smallest social adaptability (indicators for all scales in the range of 0-2 points); «profile» of increased conformance (Kn scale 4-6 points, other scales in the range of 0-2 points); «profile» of increased creativity (Kp scale 4-6 points, other scales in the range of 0-2 points); «profile» of increased lability (Lb scale 4-6 points, other scales in the range of 0-2 points); «profile» of maximum adaptability (indicators on all scales in the range of 4-8 points).

Methods of parametric (mean, standard deviation, Student's t-test, Pearson correlation analysis), multifunctional (*- Fischer criteria) and multivariate statistics (cluster analysis by K-means; analysis of variance). Data processing is performed using the statistical program SPSS-26.

Results

The measure of stress resistance of health care professionals corresponds to the range of the average level (M = $32,6\pm7,45$). If you group individual test results, we see that high stress resistance is observed in 38 people (44.7%), of which 24 doctors (46.2%) and 14 nurses (43.8%). Normal stress resistance was found in 37 people (43.5%), of which 22 doctors (42.3%) and 15 people (46.9%) of the average medical staff. Poor stress resistance was observed in 10 people (11.8%), of which 6 doctors (11.5%) and 4 (12.5%) nurses (Table 1).

Table 1

Measures of stress resistance of healthcare professionals

	<u>High stress</u> <u>resistance</u>			<u>Normal stress</u> <u>resistance</u>			Weak stress resistance		
	Pers.	%	M±σ	Pers.	%	M±σ	Pers.	%	M±σ
Doctors	24	46.2	26.1 ±	22	42.3	35.3 <u>+</u> 2.93**	6	11.5	47.5 <u>+</u>
(n ₁ = 52 pers.)			5.6*			2.93**			7.56
nurses	14	43.8	27.8 <u>+</u> 2.04*	15	46.9	33.4 <u>+</u> 1.92**	4	12.5	48.0 <u>+</u>
(n ₂ = 33 pers.)			2.04*			1.92**			0.02
Overall	38	44.7	26.7 <u>+</u> 3.2	37	45.2	34.5 <u>+</u>	10	11.8	47.7 <u>+</u>
(N = 85 pers.)	20		3.2	07		2.70	20	0	5.64

Note: $n1 \leftrightarrow n2$: (**) - p < 0.05 at t = 2.37; (***) - p < 0.01 at t = 5.88. Bold indicates indicators that are statistically significantly predominant in comparisons

Comparison of the characteristic distribution parameters in subgroups n1 and n2, which found high and normal stress resistance, gives reason to say that the indicator corresponding to the high stress resistance range is more pronounced in nurses (at t = 2.37 p < 0.05), and the indicator of the «normal stress resistance» range has a higher value in the group of doctors (at t = 5.88 p < 0.01). There are no differences in the «weak stress resistance» parameter. There is also no difference in the proportions of the analyzed levels (in all comparisons $\varphi^*_{avec} < \varphi^*_{kp}$).

Analysis of the results for the optimism test showed that it is in the range of diagnostic values of the average level ($M = 20.0\pm3.00$). 32 people (37.6%) have a high level of optimism, of which 24 doctors (46.2% of the n1 group) and 8 people are nurses (24.2% of the n2 group). The result above average was shown by 25 people (29.4%), of which 12 doctors (23.1% of the n1 group), and 13 nurses (39.4% of the n2 group).

The «below average» result was found by 16 (18.8%) respondents: 7 doctors (13,5% of the n_1 group) and 9 nurses (27.3% of the n_2 group). A low level of optimism was diagnosed in 12 respondents (14,1%). Of these, 9 doctors (17.3%) and 3 nurses (9.1%) (Table 2).

GENERAL PSYCHOLOGY, PERSONALITY PSYCHOLOGY

Table 2

Indicators	of optimism	n of medical	professionals

	High levels of <u>optimism</u>			Above the average		<u>average</u>	Low level	
	Pers. (%)	M±σ	Pers. (%)	M±σ	Pers. (%)	M±σ	Pers. (%)	M±σ
Doctors								
	24	23.25 <u>+</u>	12	19.83 <u>+</u>	7	17.57 <u>+</u>	9*^	15.0 <u>+</u>
(n ₁ = 52 pers.)	(46.2)*	0.85	(23.1) ^	0.94	(13.5)+	0.53	(17.3)	1.5
Nurses								
	8	22.63 <u>+</u>	13	20.23 <u>+</u>	9	17.11 ±	3 (9.1)	16 <u>+</u> 0
(n ₂ = 33 pers.)	(24.2)*	0.52	(39.4) ^	0.73	(27.3)+	0.33	5 (5.1)	10 1 0
Overall								
(N = 85	32 (37.6)	23.09 <u>+</u> 0.82	25 (29.4)	20.04 <u>+</u> 0.84	16 (18.8)	17.31 <u>+</u> 0.48	12 (14.1)	15.25 <u>+</u> 1.36
(N = 85 pers.))		/		/		. ,	

Note: doctors \leftrightarrow medical staff: «*» φ *=2.09, p < 0.01; «^» - φ *=1.70, p < 0.045; «+» - φ *=1.56, p < 0.05. Bold indicates indicators that are statistically significantly predominant in comparisons.

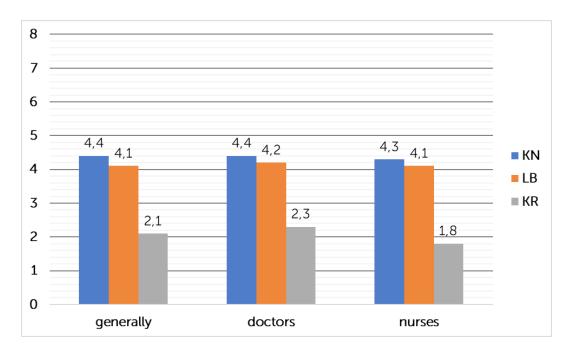
As can be seen from the data given in table 2, a high level of optimism is more typical for doctors than for nurses (at φ * = 2.09, p <0.01); above-average and below-average levels predominate among nurses (at φ * = 1.70 and φ * = 1.56, p <0.045 and r< 0.05, respectively).

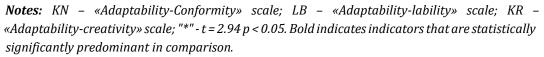
At the next stage of the study, the diagnosis of social adaptability of medical workers was carried out. It was established: as an integral personality property, adaptability is at the average level ($M = 10.7 \pm 1.12$, which is 44.4% of the maximum indicator). At the same time, there were no differences in indicators between the n_1 and n_2 groups ($t_{max} > t_{max} > 1$). The «profile» of adaptability is specific: it does not correspond to any of the «profiles» described by O. Posypanov and can be defined as a «profile» of reduced creativity with an average level of conformity and lability. The difference in the profiles of the analyzed subgroups is noted by the «**Kp**», parameter, which, despite being in the range of reduced values, is significantly more pronounced in the group of doctors ($M = 2.33 \pm 1.22$) compared to nurses ($M = 1.79 \pm 0.41$): at t = 2.94 p <0.05 (Fig 1).

GENERAL PSYCHOLOGY, PERSONALITY PSYCHOLOGY

Figure 1

«Profiles» of social adaptability of healthcare professionals





Results of Processing the entire data array by cluster analysis by K-average followed by testing the intergroup differences by analysis of variance showed the following.

Seven variables ("stress resistance"; "optimism"; "negative expectations"; "positive expectations"; "adaptability-conformity"; "adaptability-lability"; "adaptability-creativity") formed indicators of three clusters of different volumes. The first cluster is the largest. It combined the characteristics of 47 respondents ($n_1 - 28$ people/59.6%; $n_2 - 19$ people/40.4%); the next largest - the third cluster, it includes indicators of 32 examined ($n_1 - 22$ people/68.8%; $n_2 - 10$ people/31.2%). The smallest is the second cluster: it includes data on six respondents, of which the third part is doctors (2 people), and 2/3 is nurses (4 people).

The results of the analysis of variance strongly show that the properties of social adaptability do not play a predictor role in the formation of stress resistance: they remain at the same level with both very weak and normal stress resistance. Differences between clusters are formed according to the criteria of stress resistance, optimism and integrating its qualities: «positive expectations»; «negative expectations» (table 3).

The most stress-resistant medical professionals included in the first cluster: the average SU score here was 27.7 points, which corresponds to the range of normal stress resistance. Physicians and nurses equally show high and above average optimism (M = 21.3). Here, significantly less than in the third cluster, the indicator of reflection of negative expectations is expressed (M = 1.74 versus 2.91) and these respondents are more actively guided to the desired results as achievable («positive expectations» M = 11,1 versus 7,2 and 9,3 in the second and third clusters).

Table 3

			Variable indicators (M)						
Number of observations in each cluster		CU ¹	Opt ²			СР	LB	KR	
	1	47	27.7	21,3	1,74	11,1	4,44	4,14	2,04
Clusters	2	6	51.0	18,0	1,2	7,2	4,2	4,2	2,0
	3	32	36.3 сл.	18,4	2,91	9,3	4,4	4,1	2,25
Valid		85							
Passed		0	inter-clı	uster diffe	erences f	rom ana	lysis of va	riance:	
	¹ – F=141.071 p<.000								
			² – F=13.79 p<.000						
			³ – F=8.23 p<.001						
			⁴ – F=21.86 p<.000						

Results of K-mean clustering with inclusion of analysis of variance (ANOVA)

Notes: CU - stress resistance; Opt - optimism; NE - negative expectations; PE - positive expectations; CP - «adaptability-conformance»; LB - «adaptability-lability»; KR - «adaptability-creativity».

The weak and very weak stress resistance characteristic of respondents included in the third and second clusters (M = 36.3 and M = 51.0, respectively) is accompanied by reduced optimism (M = 18.4 and M = 18.0, respectively), passivity in relation to their desires. This phenomenon is caused by a weakly expressed orientation to positive expectations (M = 9.3 and M = 7.2, respectively), with the activity of the internal mood of the personality to negative expectations (M = 2.91 and M = 1.2, respectively).

Discussion

In the process of analyzing psychological resources of coping with threats to the preservation of the integrity, authenticity of the person, the concept of personal potential, which defines this phenomenon as an integral characteristic of the level of personal maturity (Leontiev, 2007, 2011a, 2011b), has special heuristics. Personal potential includes complex education - optimism explored in the methodological framework of two main concepts: positive psychology and attributive style (Seligman, 2006; Abramson et al., 1989; Abramson, Seligman & Teasdale, 1978) and dispositional theories of personality (Carver et al., 2010; Scheier et al., 2001; Brissette, Scheier, Carver, 2002). Numerous studies make it possible to call dispositional optimism a significant predictive indicator of subjective well-being, constructive coping with stresses (Enikolopov et al., 2009; Zaitsev, 2012; Gordeeva et al., 2018). The considerable activity of researchers in the field of personal potential issues leads to the actualization of the problem of its predictor role in ensuring the stress resistance of subjects of specific professional communities, in particular, medical workers, which determined the problem of the study we conducted: the justification of personal predictors of stress resistance of subjects of clinical activity.

The differences established in the data of the first stage of statistical analysis in the indicators of stress resistance, levels of optimism, properties of adaptability-creativity between subjects of medical and nursing activities were confirmed in the results of multidimensional statistics, which made it possible to consolidate persons with congruent diagnostic indicators into certain clusters.

The obtained results indicate that adaptability as a complex property of the personality of a medical worker is determined by the average level of conformity formation and lability, while insufficient creativity does not allow to actively influence the structure of interaction of the personality with the social environment, creating specific "barriers" in the implementation of joint activities, which is especially important in changing environmental conditions.

Three types of stress resistance are identified depending on the level of severity of this property. For the first, having the greatest representation among medical professionals (55.3%), normal stress resistance is characteristic, closely interrelated with actively demonstrated optimism, based on a significant predominance of positive life expectations

GENERAL PSYCHOLOGY, PERSONALITY PSYCHOLOGY

over negative ones. This species can be defined as «Optimistic stress resistance». It forms the core of personal potential and characterizes a mature, authentic personality.

The personal potential of respondents who made up two other types of stress resistance (weak and very weak) does not have a resource of positive expectations. The phenomenon of reduced optimism established in these clusters obviously acts as a predictor of weak stress resistance of medical professionals. There is reason to define conditionally these combinations of personal qualities in general as **«Type of disturbing negative expectations»**.

The study confirmed the hypothesis of the predictor role of dispositional optimism in ensuring the stress resistance of medical professionals. The results of the analysis indicate that in the practice of consulting work, special attention should be paid to providing psychological support to owners of the type of alarming negative expectations, directing efforts to find personal resources for the formation of positive expectations, developing personal potential - the basis of individual sustainability in a changing world, a world of threats to stability and well-being of both society and each individual.

Conclusion

It has been established that medical professionals are characterized by an average level of stress resistance, and it is more pronounced in the group of doctors, while among nurses there are significantly more owners of high stress resistance.

It has been shown that dispositional optimism is a component of the personal potential of doctors and nurses who have predominantly medium-high stress resistance, which gives reason to consider positive expectations as a psychological education that plays the role of a predictor of stress resistance.

It has been shown that the predictor role of dispositional optimism in the manifestation of stress resistance among medical professionals can be represented by the types: "Optimistic stress resistance" and "Type of alarming negative expectations" – a type that involves active psychological support for subjects of medical activity.

Adaptability of medical professionals is ensured by an average level of conformance and lability, however, the «adaptability-creativity» property is poorly developed, which can complicate the adoption of flexible, non-standard decisions when carrying out activities in conditions of vital threats.

Literature

- Abdollahi, A., Abu Talib, M., Yaacob, S. N., & Ismail, Z. (2014). Hardiness as a mediator between perceived stress and happiness in nurses. Journal of Psychiatry and Mental Health Nursing, 21(9), 789–796.
- Abramson, L. Y., Metalsky, G. I., & Alloy, L. B. (1989). Hopelessness depression: A theory-based subtype of depression. Psychological Review, 96, 358–372.

- Abramson, L. Y., Seligman, M. P., & Teasdale, J. D. (1978). Learned helplessness in humans. Journal of Abnormal Psychology, 87, 49–74.
- Alexandrova, L. A. (2011). Adaptation to Difficult Life Situations and Psychological Resources Of The Individual. In D. A. Leontyev (Ed.), Personal Potential: Structure and Diagnosis (P. 54–57). Meaning.
- Alloy, L. B., Kelly, K. A., Mineka, S., & Clements, C. M. (1990). Comorbidity and depressive disorders: A helplessness & hopelessness perspective. American Psychiatric Press.
- Bodrov, V. A. (2007). Psychological Mechanisms of Human Adaptation. In A. L. Dikaya, A. L. Zhuravlev (Ed.), Psychology of Adaptation and The Social Environment: Modern Approaches, Problems, Prospects. (Pp. 42–61). Institute of Psychology of the Russian Academy of Sciences.
- Brissette, I., Scheier, M. F., & Carver, C. S. (2002). The role of optimism in social network development, coping, and psychological adjustment during a life transition. Journal of Personality and Social Psychology, 82(1), 102–111.
- Carver, C. S., Scheier, M. F., & Segerstrom, S. C. (2010). Optimism. Clinical Psychology Review, 30, 879–889.
- Enikolopov, S. N., Petrova, E. A. (2009). Optimism as One of the Components of Subjective Well-Being. Psychology Questions, 1, 51–57.
- Fedotova, V. A. (2020). The Determinants Of Resilience In Three Generations Of Modern Russia. Russian Psychological Journal, 17(1), 74–91.
- Gordeeva, T. O. (2011). Optimism as A Component of Personal Potential. In D. A. Leontiev (Ed.), Personal Potential: Structure and Diagnosis. (Pp. 131–177). Meaning.
- Gordeeva, T. O., Lunkina, M.V., Sychev O. A. (2018). Sources of Optimistic Thinking and Adolescent Well-Being. Psychology Questions, 5, 13–22.
- Gordeeva, T. O., Osin, E. N., Shevyakhova, V. Yu. (2009). Diagnosing Optimism as A Style of Explaining Success and Failure: The STONE Questionnaire. Meaning.
- Gordeeva, T. O., Sychev, O. A., Osin, E. N. (2010). Development of A Russian-Language Version of the Disposition Optimism Test (LOT). Psychological Diagnostics, 2, 36–64.
- Ilyasova, G. N. Farakhyanova, A. K. (2016). Relationship of Stress Resistance and Occupational Activities of Gps. Modern Problems of the Socio-Humanities. Materials of The IV International Scientific and Practical Correspondence Conference (104–109). Scientific and Educational Center «Knowledge».

Ilyin, E. P. (2015). Psychology of Hope: Optimism and Pessimism. Peter.

- Kravchenko, L. Sh., Akhmedova, Sh. U. (2017). Organization of Preventive Measures to Identify and Eliminate Stress in The Work of a Doctor. Young Scientist, 17(151), 127–129.
- Lambert, V., Lambert, C., Petrini, M., Xiao, M., & Zhang, Y. (2007). Workplace and social factors associated with physical and mental health in hospital nurses in China. Nursing and Health Sciences, 9, 120–126.
- Leontiev, D. A. (2007). Experience in Structural Diagnostics of Personal Potential. Psychological Diagnostics, 1, 8–31.
- Leontiev, D. A. (2011a). Personal Potential as an Object of Study. In D. A. Leontiev (Ed.), Personal Potential: Structure and Diagnosis. (Pp. 5–11). Meaning.
- Leontiev, D. A. (2011b). Wisdom as Integral to Characteristics of Personal Potential. In D. A. Leontiev (Ed.), Personal Potential: Structure and Diagnosis. (pp. 92–106). Meaning.
- Luthans, F., & Broad, J. D. (2022). Positive psychological capital to help combat the mental health fallout from the pandemic and VUCA environment. Organizational Dynamics, 51(2). https:// doi.org/10.1016/j.orgdyn.2020.100817
- Makhnach, A. V. (2020). Human Viability Under Uncertainty. Institute of Psychology of the Russian Academy of Sciences. Organizational and Labor Psychology, 5(4), 131–166. <u>Https://doi.org/10.38098/Ipran.Opwp.2020.17.4.006</u>

Personality Psychology: Dictionary Reference (2001). In P. P. Ermine, T. M. Titarenko (Ed.). Ruta. Peterson, C. (2000). The Future of Optimism. American Psychologist, 55(1), 44–55.

- Posypanov, O. G. (2002). Methodology for Measuring the Social Adaptability of a Person. Modern Psychology: The State and Perspectives of Research. Part 2: General and Social Psychology, Personality Psychology and Psychophysiology (Pp. 93–112). Institute of Psychology of the Russian Academy of Sciences.
- Pustashieva, M. N. (2017). Assessment of The Psychological Status of Patients and Emotional Burnout Syndrome in Primary Care Physicians On an Outpatient Basis. Smolensk Medical Almanac, 1, 298–302.
- Rasskazova, E. I., Gordeeva, T. O. (2011). Copying Strategies in The Structure of Personal Potential. In D. A. Leontyev (Ed.), Personal Potential: Structure and Diagnosis (267-299). Meaning.
- Rivera, M., Shapoval, V., & Medeiros, M. (2021). The relationship between career adaptability, hope, resilience, and life satisfaction for hospitality students in times of Covid-19.

Journal of Hospitality, Leisure, Sport & Tourism Education, 29. <u>https://doi.org/10.1016/j.jhlste.2021.100344</u>

- Rogozyan, A. B. (2012). Typology of Individual Stress Coping Styles at Different Levels of Personality Neuropsychiatric Resilience. Philosophy and Psychology of Personality Activity. Materials of The V All-Russian Scientific and Practical Conference of Kuban State University, (Pp. 118–121). Kuban State University.
- Rogozyan, A. B., Yasko, B. A. (2012). Relationship of Personality Focus and Stress Resilience: Psychological Analysis. Days of Science: materials of the International Scientific and Practical Conference (pp. 45–54). Prague: Education and Science.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (2001). Optimism, pessimism, and psychological well-being. Optimism and pessimism: Implications for theory, research, and practice, 189–216.
- Schwarz, S. (2018). Resilience in psychology: A critical analysis of the concept. Theory & Psychology, 28(4), 528–541. <u>https://doi.org/10.1177/0959354318783584</u>
- Seligman, M. P. (2006). New Positive Psychology. Sophia.
- Shadrina, A. Yu. (2019). Stress and stress resistance of healthcare professionals. Kronos, 17(34), 62.
- Soboleva, A. E. (2018). Relationship of Resilience and Attitude to Work in Healthcare Professionals. Sustainable Development of Science and Education, 8, 46-50.
- Southwick, S. M., & Charney, D. S. (2018). Resilience: The science of mastering life's greatest challenges. Cambridge University Press.
- Sychev, O. A. (2010). Relationship of Cognitive Activity and Dispositional Optimism. World of Science, Culture, Education, 5, 125-127.
- Tolochek, V. A. (2021). The «Viability» Phenomenon: Possible Research Perspectives. Institute of Psychology of the Russian Academy of Sciences. Organizational and Labor Psychology, 6 (2), 21-46
- Tsiving, D. A., Evnina, K.Yu. (2013). Questions of the diagnosis of optimism and pessimism in the context of the theory of dispositional optimism. Psychological studies, 6(31).
- Yasko, B. A., Kazarin, B. V., Gorodin, V. N., Chugunova, N. A., Pokul, L. V., Skripnichenko, L. S., Skorobogatov, V. V. (2021). Resilience and personal resources of doctors of the «red zones» of covid hospitals: psychological analysis. Bulletin of the Russian State Medical University named after N.I. Pirogov, 4, 68–76. <u>https://doi.org/10.24075/vrgmu.2021.042</u>

Yelnikova, O. E., Pronina, A.N., Faustova, I.V., Komlik, L. Yu. (2022). Features of The Resilience of a Modern Person in The Era of a Pandemic. Russian Psychological Journal, 19(3), 164–177.
Zaitsev, E. F. (2012). The Phenomenon of Optimism/Pessimism. Psychological Journal, 3–4, 33–40.

> Received: March 09, 2023 Revision received: April 25, 2023 Accepted: April 26, 2023

Author Contribution

Bela Aslanovna Yasko – research concept and its theoretical justification, methodological justification of empirical search, writing the text of the Introduction section, scientific editing of the texts of the "Results" section; "Discussion of results"; a critical revision of the article's content.

Lyudmila Sergeevna Skripnichenko – mathematical and statistical processing of empirical data in the SPSS-26 program; writing the sections "Results", "Annotation", "Guidelines"; preparation of the general text of the article; working with sources.

Sergey Nikolaevich Strikhanov – formation of an empirical sample, discussion of the results and their practical significance, writing of the review part of the article.

Diana Davidovna Tedoradze – selection and conduct of psychodiagnostic procedures, presentation of primary statistics.

Author Details

Bela Aslanovna Yasko – Dr. Sci. (Psychology), professor, department of personnel management and organizational psychology, Kuban State University, Krasnodar, Russian Federation; professor, department of public health and health, Kuban State Medical University, Krasnodar, Russian Federation; SPIN-код: 8181-1410, AuthorID: 490262, ORCID ID: <u>https://orcid.org/0000-0002-6847-112X</u>, e-mail: <u>shabela-1@yandex.ru</u>

Lyudmila Sergeevna Skripnichenko – Cand. Sci. (Sociology), associate professor, associate professor, department of personnel management and organizational psychology, Kuban State University, Krasnodar, Russian Federation; SPIN code: 7391-7547, AuthorID: 674971; ORCID ID: <u>https://orcid.org/0000-0002-8379-6256</u>, e-mail: <u>lud-skr@mail.ru</u>

Sergey Nikolaevich Strykhanov – Cand. Sci. (Medicine), associate professor, head of the department of public health and health, taculty of advanced training and postgraduate

GENERAL PSYCHOLOGY, PERSONALITY PSYCHOLOGY

training, Kuban State Medical University, Krasnodar, Russian Federation; ORCID ID: <u>https://orcid.org/0009-0008-1715-3835</u>; e-mail: <u>ozz@ksma.ru</u>

Diana Davidovna Tedoradze – graduate student of psychological sciences, department of personnel management and organizational psychology, Kuban State University, Krasnodar, Russian Federation; ORCID ID: <u>https://orcid.org/0009-0007-3038-4382</u>, e-mail: <u>Diana.tedoradze.97@mail.ru</u>

Conflict of Interest Information

The authors have no conflicts of interest to declare.