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Features of Teachers' Meaning-based Regulation Under Conditions of Information Uncertainty

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Abstract

Introduction. Meaning-in-life orientations and self-reflection are important indicators of the regulation of personal meanings. In a modern rapidly changing society, individuals do not fully manage their lives due to the influence of various uncertainty factors. The COVID-19 pandemic that began in early 2020 and swept across the world is considered a global factor of uncertainty. The increased uncertainty of life associated with the pandemic is an additional stressor. This paper represents a first effort in obtaining empirical data on gender characteristics of teachers' meaning-based regulation in the context of the coronavirus pandemic. This paper reports the results of an empirical study of differences in meaning-in-life orientations and self-reflection among teachers before and during the pandemic as different conditions of information uncertainty in their lives, **Methods**. The study was conducted amona female teachers of secondary schools in the Rostov region in March 2017 (n = 53) and in October 2020 (n = 43), i.e. before and during the pandemic, which can be considered different conditions of information uncertainty in their lives. We used the following psychological assessment tools: (a) the Meaning-in-Life Orientations test by D. A. Leont'ev and (b) the Self-reflection Questionnaire by I. A. Stetsenko. Results. We observed an increase in all means of both tests during the pandemic, compared to the pre-pandemic values. Differences in all parameters are statistically significant (according to the Mann–Whitney U test). Discussion. Our findings indicate that the pandemic represents a surmountable stressor for the homogeneous acmeological category of female teachers surveyed in this study. Information uncertainty contributes to constructive restructuring of the processes of meaning-based regulation and psychological adaptation, which leads to an increase in the level of meaningfulness of life orientations and self-reflection among the respondents.

Keywords

meaning, meaning-based regulation, meaning-in-life orientation, meaningfulness of life, selfreflection, information uncertainty, stressor, coronavirus infection, pandemic, female teacher

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Highlights

> The leading indicators of the orientation of meaning-based regulation include meaning-in-life orientations and self-reflection.

▶ The coronavirus pandemic as a form of information uncertainty is associated with a significant increase in indicators of meaning-in-life orientations and self-reflection among female secondary school teachers, compared to the pre-pandemic values.

▶ In the context of the coronavirus pandemic, female secondary school teachers perceive an increase in information uncertainty as a surmountable stressor that is associated with a transition to a state of greater organization and mobilization of the processes of meaning-based regulation.

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Introduction

The meaning-based regulation represents the highest level of the regulation of personal development. The meaning-based nature of the key mechanisms of managing individuals' interactions is determined by the integral nature of the influence of meaning-based constructs on their behavior (Leont'ev, 1997). At the same time, there is a difference between the category of meaning and the category of sense, which is manifested in the discourse of psychology, linguistics, cultural studies, and philosophy. Meaning is necessary to clarify the sense of a message in verbal communication via a minimal set of words (Wierzbicka, 2019). Meaning is a way of setting and contextual use of sense, forming Frege's semantic triangle, as a logical model of a sign (Frege, 2008). In the humanities, there is no generally accepted definition of the concept of 'meaning' because it contains various characteristics (Leont'ev, 2007). Meaning represents an interdisciplinary construct and is increasingly seen as a philosophical-linguistic-psychological category (Seriy, 2002).

Today, the psychological study of the phenomenon of meaning becomes an important area for theoretical and experimental work. The meaning-based approach helps to expand the scope of problems to be solved in the field of personal value-motivational sphere, education in a rapidly changing world, ways of experiencing difficult situations, and understanding life. These issues are considered in works on modeling meaning-based reality (Leont'ev, 2007), analysis of meaning-based attitudes (Asmolov, 2016), empathy (Vasilyuk, 2016), levels of the meaning-based sphere (Bratus', 2014), foundations of meaning-based didactics (Fomenko & Abakumova, 2014), features of meaning-based communication in learning (Kagermazova, 2014), and the search of the meaning of life (Frankl, 2017).

To fully establish meaning-based connections in the system as its understanding, it is necessary to go beyond its limits into the context of Bakhtin's 'outsideness' (Bakhtin, 2012). This

explains the fact that the meanings of words are found from sentences, the meanings of sentences are found from texts, the meanings of texts are found from contexts, and the meaning of life is found beyond life. This means that it is impossible to abstractly deal with it, but only based on the target context (Tul'chinskii, 2018). Then the construction of general conceptual models of meaning is influenced by the context of cognition, activity, and communication in its broadest sense, which is an extremely heterogeneous field with unique conditions for personal development.

The current interest in the impact of various effects of uncertainty on personal development is associated with the need to consider internal subjective factors of development, including needs, motives, goals, interests, and personal meanings of the individual. All of them may not coincide with the external objective conditions of activity situations (Kocheulova, 2018). Considering the influence of uncertainty factors makes it possible to consider the external and internal risks in the process of personal development for a better understanding of the experiencing subject's behavior. Uncertainty becomes a new methodological principle and a key element of science, which guides psychological theories of thinking, consciousness, and self-regulation (Kornilova, 2018). The postmodern paradigm and interdisciplinary approach in the study of the phenomena of uncertainty show the changeability of the modern society states as the transitivity of modern civilization (Martsinkovskaya, 2018).

In terms of the effects of uncertainty, the most effective impact has had the global pandemic of the COVID-19 infection that that began in early 2020. The impact of this pandemic should be considered as a global effect of uncertainty on the modern development of civilization. Unlike an epidemic, a pandemic is not a continuously transmitted disease that has a progressive spread in some areas beyond a certain epidemiological threshold. According to WHO, a pandemic is the highest phase in the epidemic development that is steadily spreading worldwide.

The primary source of uncertainty is the increased possibility of contacting coronavirus infection (Advice for the public..., 2020). This source of increased vital risk entails secondary factors that increase the uncertainty of life – the introduction of sanitary standards and distances when people are in contact ('social distancing') and the exclusion or minimization of social contacts ('selfisolation') (Pfattheicher, Nockur, Böhm, Sassenrath, & Petersen, 2020). These initial uncertainties generate 'derivative' uncertainties that affect all areas of public life, ranging from the spatial distance between individuals and their number in certain rooms, changes in consumer behavior, transition to distance learning, business shutdowns, and ending with quarantine restrictions on moving to other regions and countries.

T. V. Kornilova notes that during the coronavirus pandemic, personal regulation of internal choice and decision-making is transferred to the area of interactions with external social requirements, in particular, due to the need to maintain social distancing (Kornilova, 2020). In terms of the psychosomatic state, there was an increase in insomnia, depressive and anxiety reactions, post-traumatic and obsessive-compulsive disorders, as well as the state of social alienation (Talevi et al., 2020). According to L. E. Gorlevskaya, during the pandemic, there was a transformation in consumer preferences and an increase in demand for food, pharmaceuticals, and personal hygiene products; the consumption of luxury goods, tourist services, and cars decreased. At the same time, there was a rapid growth of electronic services and online commerce; the consumption of media content has changed. There was an increase in demand for TV and Internet broadcasts and a decline of interest in outdoor advertising (Gorlevskaya, 2020).

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Since the spring of 2020, various quarantine measures have been applied around the world to prevent the spread of coronavirus infection, including the complete blocking of the movement of people and the shutdown of economy sectors, significant restrictions on social, cultural, and economic activities. Thus, restrictions were imposed on the export of certain types of products based on the Decree of the Government of the Russian Federation no. 223 dated March 2, 2020. In such a force majeure situation, entertainment, sports, social, educational, and other events that attracted large crowds were cancelled or suspended. This resulted in the impossibility of fulfilling contracts for the supply of goods and the provision of services due to the termination of the fulfillment of obligations by Rule 417 of the Civil Code of the Russian Federation (Baranova & Udalov, 2020).

There were effects of distortion of objective facts and the appearance of unconfirmed news – fakes that misled various segments of society in terms of broadcasting information about coronavirus infection. In a socio-psychological context, the total spread of such a combination of adequate and inadequate facts should be considered an infodemic – the information uncertainty of knowledge about coronavirus infection. Transmitting into an individual's cognitive sphere, this provokes an increase in the level of anxiety, stress, and depressive disorders (Zinchenko, Morosanova, Kondratyuk, & Fomina, 2020). This can lead to adverse changes in behavior patterns due to a decrease in the level of critical thinking when analyzing truthful and fake information. This also may result in the violation of anti-epidemiological requirements, and a decrease in trust in government and medical authorities. To successfully overcome information uncertainty during the period of self-isolation, it is necessary to be engaged in tactical and strategic goal-setting and achieve goals, which means a higher level of self-regulation of the individual in the context of infodemic (Zinchenko et al., 2020).

Therefore, the global impact of infectious diseases, in this case the coronavirus pandemic, should be considered as a global factor of uncertainty affecting all individuals in the objective and subjective spheres.

Some researchers note that there are tendencies to overcome the influence of the current coronavirus pandemic as a global factor in the uncertainty of life. It is a temporary situational phenomenon (Mal'kova, 2020), which overcoming, in addition to medical prevention and treatment measures, should be supplemented by various psychological techniques and coordinated psychological assistance to the population (Emel'yanova, 2020).

In the context of studying human behavior under the influence of effects of uncertainty, it is important to examine the features of the processes of meaning-based regulation under various effects of uncertainty - in this case, under the influence of coronavirus infection. We should note that in the first phase, we studied meaning-based regulation in 2016–2017, i.e. before the pandemic, when our respondents were in a more definite state of life. The second phase of the study began in October 2020, when the pandemic lasted for six months, and our study participants had to reorient themselves in the face of increased life uncertainty. Therefore, it is necessary to investigate the direction and quality of changes in meaning-based regulation under different conditions of uncertainty.

The COVID-19 pandemic began in late 2019 and swept across the world. Since the beginning of 2020, it has been considered a pandemic. Under its influence, the life of the world community proceeds in unknown conditions, which uncertainty introduces considerable changes and restrictions in all spheres of life. We classify the impact of the coronavirus pandemic as a global effect of

uncertainty affecting modern individuals' lives. We compare it with unexpected and severe 'black swan' crises (Taleb, 2018). The presence of unreliable information about coronavirus infection is considered as information uncertainty in the context of obtaining information and rethinking life under its influence. In the context of studying behavior changes under the influence of such effects of uncertainty, it is important to investigate the trends in the meaning-based regulation of an individual who is under the influence or in absence of the effects of such information uncertainty.

Methods

To identify trends in meaning-based regulation under the influence of the coronavirus pandemic as a form of information uncertainty, we carried out a specially organized analysis of the empirical data obtained in the first and second stages of the study. In both phases, we used two psychodiagnostic instruments for studying meaning-based regulation. Their indicators represented the main and additional markers of polar sense-building strategies (Godunov, Elagina, & Belova, 2017). These were (a) the Meaning-in-Life Orientations test by D. A. Leont'ev and (b) the Selfreflection Questionnaire by I. A. Stetsenko. Thus, we examined seven indicators:

- 1. General Life Meaning (GLM);
- 2. Purposes in Life;
- 3. Life Process;
- 4. Life Productivity;
- 5. Internal Locus of Control;
- 6. External Locus of Control;
- 7. Self-reflection Level (SRL).

Tests with the use of these psychodiagnostic instruments were carried out twice – the first time – before the coronavirus pandemic, the second time – during the coronavirus pandemic. In our study, we used two samples of almost similar size and having similar acmeological features – age, gender, marital status, level of education, professional orientation, and place of residence. In this pair of samples tested before and during the pandemic, the respondents were not the same ones (not a longitudinal study) but different individuals who met the requirements for the characteristics of the sample – married female teachers of secondary schools in the Rostov region. To assess the significance of differences in indicators in each pair of samples, we used the Mann–Whitney U test (Nasledov, 2012).

The Meaning-in-Life Orientations test contains pairs of opposite statements that reflect the idea of the factors that make an individual's life meaningful. When answering each question, a respondent has to choose one from two opposite statements (for example, "Usually I'm: terribly bored / full of life and enthusiasm"). Each answer should be assessed on a 7-point rating scale (Leont'ev, 2000). The General Life Meaning indicator is calculated for each of 20 test items. The Purposes in Life scale characterizes the presence or absence of purposes in a respondent's life in the future, which provide life meaning, direction, and time perspective. The Life process scale indicates whether a respondent perceives the process of his/her life as interesting, emotionally rich, and filled with meaning. The Life Productivity scale reflects a respondent's assessment of the passed segment of the life path, the feeling of its productivity and meaningfulness. The Internal Locus of Control scale shows whether a respondent perceives himself/herself as an architect of his/her life. The External Locus of Control scale shows a respondent's perception of the controllability of his/her life. The first three factors form mining-in-life orientations - purposes

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in life (sight into the future), richness of life (reliance on the present), and satisfaction with selfrealization (acceptance of the past). The last two factors characterize a respondent's internal locus of control as a general worldview belief that control is possible and he/she is able to implement it.

The Self-reflection Questionnaire by I. A. Stetsenko establishes an indicator of self-reflection by examining the processes of self-analysis and self-assessment of respondents. This enabled us to get an idea of respondents' attitudes towards themselves (Stetsenko, 2003). While answering 60 questions, respondents chose how fully their judgments about themself correspond to the statements presented in the questions. Then we calculated the general indicator of Self-reflection Level using the total scores of all of the questionnaire items.

Mathematical processing of the empirical data included the determination of the average values of the studied indicators 'before' and 'during' the pandemic. We also assessed the statistical significance of differences.

Results

Both samples coincided in terms of the main acmeological indicators (gender, age, level of education, professional orientation, marital status, and place of residence) and were of almost similar size. In our empirical study of the features of meaning-based regulation under the influence of various conditions of uncertainty, we obtained means for the test values. Table 1 presents the differences found in indicators. To establish the statistical significance of differences, we calculated the Mann–Whitney U_{emp} coefficients.

Table 1 Means of meaning-in-life orientations and self-reflection, and the Mann–Whitney U_{emp} coefficients of the significance of their differences ($U_{cr} = 670$ at the p ≤ 0.05 significance level) in female secondary school teachers 'before' and 'during' the coronavirus pandemic <u>The empirical U_{emp}</u> Before the During the Scale COVID-19 COVID-19 Mann-Whitney pandemic pandemic coefficient March 2021 Period of testing February 2017 Sample size 37 46 42.6 Mean age, years 41.3 General Life Meaning (GLM) 110 122 266 Purposes in Life 35 38 610 Life Process 32 35 316 27 30 Life Productivity 468 Internal Locus of Control 23 25 337 External Locus of Control 32 36 406 Self-reflection Level (SRL) 392 402 428

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According to the data presented in Table 1 and considering all the studied indicators of the Meaning-in-Life Orientations test and the level of self-reflection, the differences in female secondary school teachers 'before' and 'during' the pandemic are statistically significant, as $U_{emp} \leq U_{cr} = 670$ at the $p \leq 0.05$ significance level. Under the influence of such information uncertainty, meaning-based regulation is restructured. Particularly, there is an increase in indicators of the level of self-reflection, general life meaning, perception of the past, present, and future, as well as internal and external locus of control. Such an increase may indicate the transition of the meaning-based sphere to the level of stricter organization and increased mobilization. This may be explained by the mechanisms of the formation of new personal meanings, their initiation, and changes in the meaning-based choice to overcome the increased uncertainty in the world caused by the coronavirus pandemic. This influence of information uncertainty should be considered as an additional stressor. It is substantial but surmountable for the female group of respondents of a 'subject – subject' profession type (according to the classification of E. A. Klimov).

Discussion

This study was conducted to identify indicators of meaning-in-life orientations and selfreflection among teachers. We obtained means for the tests used in our samples and identified differences between them. We conducted testing in the same city on acmeologically identical samples in March 2017 and October 2020. In terms of studying the influence of uncertainty on the meaning-based regulation of the experiencing subject, this study represents a psychological study 'before' and 'during' the coronavirus pandemic.

The differences between all indicators established during the study 'before' and 'during' the pandemic were statistically significant. Means of meaning-in-life orientations and self-reflection, measured before the pandemic, were lower than during the pandemic. Therefore, it can be considered as an additional factor that has never existed before and which enhances the information uncertainty of modern life. That is, after the beginning of the pandemic, the higher indicators of meaning-based regulation indicate the transition of the meaning-based sphere of the respondents to a state of greater organization and increased mobilization. We assume that this is how self-regulating mechanisms for choosing and initiating relevant personal meanings are implemented to overcome the increased resistance of the uncertainty of life in the world brought by the coronavirus pandemic. Therefore, the female secondary school teachers who participated in our study perceive the impact of the pandemic as a surmountable uncertainty factor. Under its influence, there was an increase in the level of self-reflection, meaningfulness of their lives, perception of the past, present and future, as well as internal and external locus of control. Our assumption is confirmed by the fact that other researchers also note a trend towards overcoming the impact of the pandemic (Mal'kova, 2020; Pfattheicher et al, 2020).

Conclusions

In our opinion, the study of the features of meaning-based regulation on the most homogeneous (in acmeological terms) sample using the same battery of psychological tests is of great value. We conducted psychological survey among teachers using the Meaning-in-Life Orientations test by D. A. Leont'ev and the Self-reflection Questionnaire by I. A. Stetsenko. Our empirical study can be considered as a one-factor experiment. The variable factor was the different level of influence of uncertainty on respondents' meaning-in-life orientations and self-reflection. We consider

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the change in uncertainty as the state before the spread of coronavirus infection (March 2017) and during the pandemic (October 2020).

The data obtained in our empirical study can be used to construct and refine various groups of conceptual models for overcoming uncertain and crisis situations.

Clearly, *further research* will be needed to identify the effect of such a global factor of uncertainty as the impact of the pandemic on various gender, age, professional, ethno-confessional, and geographical categories of respondents. It is also relevant to establish the boundaries of a constructive response to the impact of a pandemic in the form of eustress, and to identify areas of distress influence that negatively affects the organization of meaning-based activity in a pandemic. In turn, eustress increases the mobilization resources of meaning-based regulation. This may help develop targeted techniques of psychological assistance to the groups subjected to distressing effects of coronavirus infection. At the same time, a reasonable increase in the battery of psychodiagnostic tests becomes important. Such psychodiagnostic testing makes it possible to expand the studied spheres of meaning-based regulation of the experiencing individual.

References

- Advice for the public: Coronavirus disease (COVID-19) (2020). Retrieved from https://www.who.int/ ru/emergencies/diseases/novel-coronavirus-2019/advice-for-public (in Russ.).
- Asmolov, A. G. (2016). Design of educational images in science and culture. *Obrazovatel'naya politika (Education Policy)*, 1, 86–88. (in Russ.).
- Bakhtin, M. M. (2012). *Collected works in 7 volumes* (Vol. 3). Moscow: Yazyki slavyanskikh kul'tur. (in Russ.).
- Baranova, A. V., & Udalov, M. I. (2020). Application of Article 417 of the Civil Code of the Russian Federation considering the coronavirus pandemic. In O. N. Shirokov (Ed.), A new word in science: Development strategies: Proceedings of the All-Russian theoretical and practical conference with international participation (pp. 138–141). Cheboksary: Interaktiv plyus. (in Russ.).
- Bratus', B. S. (2014). The levels of development of the meaning sphere of personality. In I. V. Abakumova,
 P. N. Ermakov, I. A. Rudakova (Eds.), *General theory of meaning, psychological concepts of meaning formation, sense-didactics* (pp. 136–146). Moscow: CREDO. (in Russ.).
- Emel'yanova, E. N. (2020). Features of psychological assistance in a situation of a coronavirus pandemic. In G. Y. Gulyaev (Ed.), *Management of socio-economic systems: Theory, methodology, and practice: Collection of articles of the VII International Theoretical and Practical Conference* (pp. 142–145). Penza: Nauka i Prosveshchenie. (in Russ.).
- Fomenko, V. T., & Abakumova, I. V. (2014). Psychological and meaning aspects of the integrative organization of the educational process. In I. V. Abakumova, P. N. Ermakov, I. A. Rudakova (Eds.), *General theory of meaning, psychological concepts of meaning formation, sense-didactics* (pp. 350–376). Moscow: CREDO. (in Russ.).
- Frankl, V. (2017). *Man's search for meaning: Young adult edition (reprint edition)*. V. Frankl (Author), J. Boyne (Foreword). Boston, USA: Beacon Press.
- Frege, G. (2008). Funktion, begriff, bedeutung: Funf logische studien = Function, concept, meaning:

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the five logical studies. Goettingen, Germany: Vandenhoeck & Ruprecht.

- Godunov, M. V., Elagina, M. Yu., & Belova, E. V. (2017). Studying the personal profiles of the polar meaning-making strategies. *Russian Psychological Journal*, *14*(3), 30–47. https://doi. org/10.21702/rpj.2017.3.2 (in Russ.).
- Gorlevskaya, L. E. (2020). Transformation of consumer preferences and marketing communications in the context of coronavirus. In R. M. Nizhegorodtsev (Ed.), *Economics of the Coronavirus Crisis: Challenges and Solutions: Conference Proceedings* (pp. 152–156). Moscow: NIPKTs Voskhod-A. https://doi.org/10.25728/coronacrisis.2020.18-gorlevskaya (in Russ.).
- Kagermazova, L. Ts. (2014). Meaning communications in the educational process. In I. V. Abakumova,P. N. Ermakov, I. A. Rudakova (Eds.), *General theory of meaning, psychological concepts of meaning formation, sense-didactics* (pp. 227–252). Moscow: CREDO. (in Russ.).
- Kocheulova, O. A. (2018). Overcoming uncertainty of human being's external and internal worlds. In
 E. V. Bakshutova, O. V. Yusupova, E. Yu. Dvoinikova (Eds.), *Person in conditions of uncertainty: Collection of scientific papers: in 2 volumes* (pp. 30–33). Samara: Samara State Technical University. (in Russ.).
- Kornilova, T. V. (2018). Concepts of "causal incrementalism" and psychological uncertainty as the perspectives of explanation development in psychology. In A. L. Zhuravlev, A. V. Yurevich (Eds.), *Psychological knowledge: current state and development Prospects (Series: Methodology, history and theory of psychology)* (pp. 368–384). Moscow: Institute of Psychology, Russian Academy of Sciences. (in Russ.).
- Kornilova, T. V. (2020). Personal reasons for social distancing decisions in three countries (Russia, Azerbaijan, and China). In O. N. Pervushina (Ed.), *New challenges of uncertainty: Proceedings of the All-Russian Theoretical and Practical Conference* (pp. 46–49). Novosibirsk: Novosibirsk National Research State University. (in Russ.).
- Leont'ev, D. A. (1997). An essay on personality psychology. Moscow: Smysl. (in Russ.).
- Leont'ev, D. A. (2000). *The Meaning-in-Life Orientations test (MLO)* (2nd ed.). Moscow: Smysl. (in Russ.).
- Leont'ev, D. A. (2007). *Psychology of meaning: Nature, structure, and dynamics of meaning reality* (3rd ed., add.). Moscow: Smysl. (in Russ.).
- Mal'kova, V. K. (2020). Coronavirus in the Russian mass media. *Vestnik antropologii (Herald of Anthropology)*, 2, 206–224. (in Russ.).
- Martsinkovskaya, T. D. (2018). Transitive and digital space as a new psychology of everyday life. In R. V. Ershova (Ed.), *The digital society as a cultural and historical context of human development: Collection of scientific articles and materials of the international conference* (pp. 219–223). Kolomna: State University of Humanities and Social Studies. (in Russ.).
- Nasledov, A. D. (2012). *Mathematical methods of psychological research: Data analysis and interpretation* (4th ed.). St. Petersburg: Rech'. (in Russ.).
- Pfattheicher, S., Nockur, L., Böhm, R., Sassenrath, C., & Petersen, M. B. (2020). *The emotional path to action: Empathy promotes physical distancing and wearing of face masks during the COVID-19*

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pandemic. PsyArXiv Preprints. https://doi.org/10.31234/osf.io/y2cg5

- Seryi, A. V. (2002). *Psychological mechanisms of functioning of the system of personal meanings*. Kemerovo: Avtorskoe izdatel'stvo Kuzbassvuzizdat. (in Russ.).
- Stetsenko, I. A. (2003). *Pedagogical reflection: Theory and the technology of development in future teachers*. Taganrog: Taganrog State Pedagogical University. (in Russ.).
- Taleb, N. N. (2018). *The Black Swan: The impact of the highly improbable*. (V. Son'kina, A. Berdichevskii, M. Kostionova et al., Trans.). Moscow: KoLibri, Azbuka-Attikus. (in Russ.).
- Talevi, D., Socci, V., Carai, M., Carnaghi, G., Faleri, S., Trebbi, E., ... Pacitti, F. (2020). Mental health outcomes of the CoViD-19 pandemic. *Rivista di Psichiatria*, 55(3), 137–144. https://doi. org/10.1708/3382.33569
- Tul'chinskii, G. L. (2018). The problem of meaning in social semiotics: Deep semiotics as a conceptual extension of social semiotics. *Slovo.ru: Baltiiskii aktsent (Slovo.ru: Baltic accent)*, 9(4). 15–26. https://doi.org/10.5922/2225-5346-2018-4-2 (in Russ.).
- Vasilyuk, F. E. (2016). Co-experiencing as a key category of co-experiencing psychotherapy. *Konsul'tativnaya psikhologiya i psikhoterapiya (Counseling psychology and psychotherapy)*, 24(5), 205–227. https://doi.org/10.17759/cpp.2016240511 (in Russ.).
- Wierzbicka, A. (2019). What Christians believe. The story of God and people in minimal English. New York: Oxford University Press.
- Zinchenko, Yu. P., Morosanova, V. I., Kondratyuk, N. G., & Fomina, T. G. (2020). Conscious self-regulation and self-organization of life during the COVID-19 pandemic. *Psychology in Russia: State of the Art*, *13*(4), 168–182. https://doi.org//10.11621/pir.2020.0411

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Author Contribution

I. V. Abakumova developed the methodology for the study and edited the text of the manuscript. **M. V. Godunov** contributed to study design and writing the report.

- **E. V. Belova** contributed to data collection and data analysis.
- N. E. Komerova contributed to data collection and data analysis.

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