

As a manuscript

Kolachev Nikita

**Predictors and dynamics of occupational burnout
in representatives of low-risk professions
(the case of public librarians)**

Summary

for the purpose of obtaining academic degree

Doctor of Philosophy in Psychology

Academic supervisor:

Ph.D. in Psychology,

Evgeny Osin

The dissertation was prepared at the International Laboratory of Positive Psychology of Personality and Motivation, National Research University “Higher School of Economics”.

Three published articles were prepared for the defense:

1. Kolachev, N., Osin, E., Schaufeli, W., & Desart, S. (2019). Personal resources and burnout: evidence from a study among librarians of Moscow region (in Russian). *Organizacionnaya psihologiya (Organizational Psychology)*, 9(2), 129–147.
2. Kolachev, N. & Novikov, I. (2020). Age as a predictor of burnout in Russian public librarians. *Evidence Based Library and Information Practice*, 15(4), 33– 48.
3. Kolachev, N.I. (2021). The role of personal resources in the dynamics of occupational burnout and work motivation: The case of Russian urban public librarians (in Russian). *Organizacionnaya psihologiya (Organizational Psychology)*, 11(4), 165–189.

Table of Content

Introduction	4
Relevance of the study	4
Object and subject matter of the study	7
Aim and research objectives	7
Methodological and theoretical basis of the current study	8
Reliability of the results	10
Theoretical significance	10
Applied significance.....	11
Statements for the defense.....	12
Approbation of the research	13
Empirical study no. 1	14
Empirical study no. 2	15
Empirical study no. 3	16
Conclusion.....	18
References	19

Introduction

Relevance of the study

Employee well-being in the workplace is one of the priorities of organizational psychology (Nijp, Beckers, Geurts, Tucker, & Kompier, 2012). At the same time, well-being is often associated with negative factors – stress and occupational burnout (Schaufeli & Bakker, 2004). Studies show that the presence of the latter can lead to a decrease in the employee's performance. Burnout can cause absenteeism, employee turnover, physical exhaustion, insomnia, substance abuse, and problems in marital and family relationships (Harwell, 2008). Conversely, a reduction in burnout leads to increased job performance (Kotze, 2018), employee loyalty (Vokić & Hernaus, 2015), and job satisfaction (Tarcan, Tarcan, & Top, 2017). Yet, occupational burnout not only affects employee performance, but also causes serious costs on the part of the health care system. For example, Goh, Pfeffer, & Zenios (2016) used data from the United States to show that treating the effects of stress at work accounts for up to 8% of health care costs and that stress at work can be the cause of 120,000 deaths per year.

During the last years, the COVID-19 pandemic has exacerbated many occupational health issues in contemporary society. The increase of chronic stress in the workplace has provoked an increase of professional burnout in employees in a variety of professions (Edú-Valsania, Laguía, Moriano, 2022), which makes the topic of this dissertation important. Recently it became clear that emotional burnout contributes significantly (as a mediator) to the negative correlation between work-related quality of life and symptoms of mental ill-health (Pereira et al., 2021). At the same time, it is known that "lighting", passion for work itself represents a positive psychological state (Schaufeli et al., 2002; Vodopyanova, Shestakova, 2014). Besides, researchers are searching for the ways to reduce burnout risks. Thus, professional burnout is counteracted by job involvement (Salanova et al., 2000) and personal resources, such as emotional intelligence (Bochkareva, 2016) and personality proactivity, as they contribute to the recognition and effective regulation of employees' fatigue (Bakker & de Vries, 2021).

In spite of the noticeable interest of scientists to the problem of professional burnout, they, as a rule, in their research stop on the cross-sectional way of studying this syndrome (for example, Han et al., 2020; Sokal, Eblie Trudel, & Babb, 2020; Zhou et al., 2021). At the same time, the theories and models that researchers rely on (resource preservation theory or work requirements/resource model) fundamentally assume processuality, dynamism of professional burnout. Research of one-step interrelations with several other variables gives limited information about a construct and narrows the evidence base of potential ways of practical work on prevention or mitigation of burnout manifestations. Besides, the cross-sectional character of empirical research, on the one hand, does not allow us to fully test the existing theories and models; on the other hand, it does not allow us to use all the explanatory potential of these theories and models. Time factor for a burnout is quite important because a person does not become burned out at once but goes through the process of professional environment influence that refracts through the personal features, which finally forms a reaction in the form of professional burnout that is specific for each person. In spite of the importance of the time factor, we can speak about few, and at the same time contradictory, evidence of professional burnout genesis. The existing longitudinal studies are limited to two measures (for example, Kok et al., 2021; Meseguer de Pedro et al., 2021; Skaalvik & Skaalvik, 2020), which, in comparison with the cross-sectional studies, provide more information about the relationship of professional burnout with other variables and about its dynamics, but still limit our understanding of the functioning and development of this syndrome. The fact is that with two measurements, the interval between which differs from study to study, researchers miss the intermediate values that could help to see the "turning points" in the development of a burnout. Moreover, two measurements do not allow to fix non-linear changes, which are often observed in the analysis of psychological phenomena. Thus, we can record the **first contradiction** – between the procedural, dynamic nature of the theories and models used and the design of the available research, which does not fully correspond to the nature of the former.

Human being is a dynamic system. There are different processes constantly going on in

it: old cells dying off and new cells appearing, physical and chemical interaction between them, changing phases of activity productivity, moods, and many other things. The development of professional burnout, essentially defined as a state of emotional exhaustion formed because of prolonged exposure to stress factors, is no exception (Schaufeli, De Witte, & Desart, 2020). In psychology, states (as a mental category) are characterized by proceduralism and dynamism and are traditionally contrasted with stable characteristics - personality traits (or, in other words, properties) (Prokhorov et al., 2011). Usually, states are studied from an epistemological point of view, i.e., through the study of typology and mechanisms (Ibid.). Within the framework of this concept, the procedural sides of mental states can be studied, but, as a rule, it is done by means of the method of "slices".

If we refer to some domestic interpretations of the concept "state", we will find out that an important characteristic of a state is its subjectless reflection, content (Meshcheriakov, Zinchenko, 2009). But professional burnout has a subject content - various aspects of work activity. Consequently, according to this logic, a burnout can be referred to mental processes that are characterized by a subjective reflection.

Meanwhile, there is another point of view on the essence of professional burnout. O. Polyakova (Polyakova, 2014) and V.V. Barabanhchikova (Barabanhchikova, 2016) consider this syndrome as a professional deformation, which is manifested as destructive changes in the personality structure. If we rely on S.L. Rubinstein's triad of basic psychological categories (Rubinstein, 1989) - mental processes, states, and personality properties – we can assume that professional deformations rather appear as personality properties; therefore, should demonstrate slower changes in time or their absence at all. At the same time, other researchers (Prokhorov et al., 2011) take a more cautious approach to the interpretation of the relationship between burnout and professional deformation, calling burnout only a determinant of possible personality deformation processes.

Other scholars prefer not to categorize the phenomena under study as either exclusively

stable or predominantly changeable. They are more focused on distinguishing both components in each construct (Geiser, Götz, Preckel, & Freund, 2017). This is due both to the development of statistical models that allow the decomposition of respondent response variance into stable and changeable parts, and to the fact that even in measures of stable human characteristics (e.g., Big Five traits or anxiety as a trait), researchers record a considerable amount of time-varying variance (Schmukle & Egloff, 2005). Consequently, we can note the **second contradiction** – between theoretical notions of burnout that clearly identify it as a state or a trait, and modern empirical studies that focus on the extraction of stable and changeable variance in any dimension without reference to what psychological category the construct under study belongs to. The place of a professional burnout phenomenon in the structure of psychic categories will depend on the way of its study (methods and techniques) and conclusions that researchers make.

Thus, in the offered dissertation work an attempt is made to solve the contradictions, firstly, by studying the features of professional burnout dynamics based on process theories and models; secondly, by suggesting on the basis of the data what category professional burnout should be correctly referred to - process, condition or property; and thirdly, by drawing conclusions about the possibility to improve the methodology of burnout research.

Object and subject matter of the study

The object of the research is professional burnout, **the subject matter** – features of its dynamics and connection with other psychological variables (personal resources and work motivation).

Aim and research objectives

The aim of the proposed research is to study dynamic characteristics of professional burnout in public librarians using both "cross-sectional" and "longitudinal" slices method. The task of the dynamic features study includes the investigation of static characteristics of the general burnout factor distribution as well as its components. It is necessary because librarians are an understudied professional group in psychology. The study of such a

group requires preliminary information about the peculiarities of professional burnout, correlation of the results with the severity of this syndrome in other professional categories. Besides, a static component implies consideration of interrelations with other variables, in our case - with socio-demographic as well as personal resources and work motivation. The dynamic component is investigated with the help of two methods – "cross-sectional" and "longitudinal" designs. In the method of "cross-sectional" slices the "dynamic" variable is age. The method of "longitudinal" slices allows to study connections of personal resources and work motivation with changes of professional burnout at the same respondents. The choice of these psychological indicators is caused by the fact that personal resources and motivation contribution in a burnout dynamics is less studied within the model of work demands and resources, and by the fact that practical activity of a psychologist/coach can be connected with the work on increase of personal resources and motivational components in order to influence professional burnout.

Based on this aim we set a number of specific **objectives**:

- to analyze the literature on the dynamics of professional burnout and the role of personal resources and work motivation in it;
- to study the structure of professional burnout in employees of public librarians;
- to describe the peculiarities of the dynamics of professional burnout among employees of public librarians;
- to reveal the role of personal resources and work motivation in the dynamics of professional burnout in employees of public librarians;

Methodological and theoretical basis of the current study

The proposed dissertation research is based on the principles of nomothetic (quantitative) approach. "Nomothetic cognition is focused on the search for the common, it looks for stable, reproducible and repeatable connections between phenomena and thereby establishes ontological laws to which these phenomena obey" (Momjyan, 2015, p. 16).

The choice of nomothetic approach as a reference is caused by the fact that one of the most important tasks of psychological science is the prediction of behavior that is available within this approach. Moreover, in the proposed research work the emphasis is made exactly on the study of professional burnout dynamics, which also requires the application of nomothetic cognition methods. Quantitative approach allows to estimate the degree of reliability of the obtained relations, and it is easier to correlate the results with the results of other research.

The narrative of the work follows the principle of systematicity. This means that it reveals the psychological content of each key word from the title of the thesis or article and shows the area of intersection of these sets and the whole system of relationship between them.

According to the job demands-resources model, we believe that burnout is the result of excessive mental stress caused by an imbalance of demands and resources toward the former (Bakker & de Vries, 2021).

Occupational burnout is operationalized based on the model of W. Schaufeli and his colleagues (Schaufeli et al., 2020). Personal resources are considered through the prism of personal resources theory, which is close to F. Luthans' psychological capital theory (Luthans et al., 2006) and personal potential theory of D.A. Leontiev (Leontiev, 2016). Labor motivation is considered from the position of self-determination theory of E. Deci and R. Ryan (Deci & Ryan, 2012).

In accordance with the idea of B.G. Anan'ev (Anan'ev, 1980) in the proposed study age is considered as a function of biological and historical time, that is, in the unity of biological and social.

The methodological basis of data analysis is the theory of latent variables (Borsboom, 2008). Two models form the basis of scaling results: confirmatory factor analysis (confirmatory factor analysis) and the model of modern test theory for rating scales (rating scale model).

The research methods are theoretical analysis and synthesis, correlation analysis (Spearman method), multilevel regression analysis (maximum likelihood estimator),

structural equations modeling with robust parameter estimation methods, modeling of latent changes (maximum likelihood method with complete information). Analysis of empirical data was performed in the R program (R Core Team, 2017) in the RStudio shell (RStudio Team, 2020) using packages such as "psych" (Revelle, 2022) and "lavaan" (Rosseel, 2012).

The described theoretical and methodological foundations reflect the author's point of view on the problem in question, serve as a guiding research strategy, and are not a comprehensive way of achieving true knowledge. Non-universalism follows from the fact that "the 'mental' is largely not definable once and for all in the same way, and, moreover, cannot in principle be universally defined as a subject of such research" (Vasilyuk et al., 2012, p. 6).

Reliability of the results

The credibility of the results of the proposed study is ensured by valid and reliable tools for measuring latent characteristics; modern methods for modeling latent variables that account for ever-present measurement error; and advanced methods for handling missing data that ensure a low probability of bias in sample estimates from variable values in the absence of data omissions and increase the statistical power of the analysis results by using all available information in the data.

Theoretical significance

Theoretical significance of the research lies in the fact that it makes an attempt to understand, how persistent the syndrome of professional burnout is, thus enriching the ideas about its variability, as well as testing, how justified it can be referred to the category of the states. Moreover, the offered work allows to correlate age and individual variability of mental processes on the example of a professional burnout. B.G. Ananiev (1980) paid a special attention to the problem of studying age and individual variability, he believed that the combination of "cross-sectional" and "longitudinal" methods can help to understand general laws of mentality during human ontogenesis. He considered the construction of a general theory of individual mental development to be the most actual

task of psychology.

In addition, this study proposes and substantiates a time interval for longitudinal studies of professional burnout through the age variability of this syndrome.

Applied significance

The obtained results support the existing ways of work on prevention or reduction of professional burnout level. In particular, the results of the study of age dynamics allow us to speak about the importance of the mentoring system for the beginners. Another direction of practical work in the field of burnout symptom reduction is the development of personal resources. This work is especially promising when combined with age peculiarities of people, because it is shown that on the average, the level of dispositional optimism decreases with age (Gordeeva, Sychev, Osin, 2021). At the same time, changing living and working conditions require employees to be flexible, constantly self-improving and changing, which can be problematic for seniors, especially when combined with low levels of perceived self-efficacy (Bausch, Michel, & Sonntag, 2014).

Also, the results of the study can be used in the courses traditionally taught to psychologists on psychology of health, the prevention of personal emotional burnout, as well as in the disciplines on the basics of health care for future librarians.

Statements for the defense

- 1) The structure of professional burnout and its connection with other psychological variables in the low-risk occupational group is the same as in representatives of high-risk occupational groups;
- 2) Age differences in professional burnout are found both on the group and individual level, and correspond to the results obtained on samples of other professional groups;
- 3) For the employees of urban public libraries the dynamics of motivation is not associated with the dynamics of occupational burnout over a 1-year period;
- 4) Employees of urban public libraries with higher personal resources at the beginning of the study have a more pronounced increase in the score of occupational burnout over a 1-year period (from January-March 2020 to January-March 2021);
- 5) Occupational burnout has stable and dynamic characteristics. Significant changes of burnout score are revealed in the interval of 1 year between measurements that allows to recommend this period for future researches of burnout dynamics with the help of longitudinal method.

Approbation of the research

The results of the study were presented and discussed at the following conferences and seminars:

- XVI Session of the International Library Philosophy School (September 18, 2019);
- Psy-Vyshka: Conference of Young Scientists "Actual Problems of Psychological Science" (October 31-November 2, 2019);
- VII International Scientific-Practical Conference in Memory of M.Y. Kondratyev "Social Psychology: Questions of Theory and Practice" (May 12-13, 2022);
- The third workshop of the consortium of researchers of the W. Schaufeli Burnout Assessment Tool (September 22 - 23, 2022);
- Research seminars of the Center for Fundamental and Advisory Personology for Ph.D. students at the National Research University Higher School of Economics.

Empirical study no. 1

In study 1 the first step to the study of the dynamics of the general score of occupational burnout in librarians is made by considering age differences. Particular attention is paid to the relations between occupational burnout and personal resources because the latter can act as a significant determinant of the dynamics of the former.

Study 1 involved 504 employees from 163 public libraries in Moscow region (both rural and urban). The average age of the participants is 48 years (median - 49 years); standard deviation is 11 years; age range: 17-72. Most study participants were women (96%). Two-thirds of the sample (71%) had higher education, the remaining 29% had secondary vocational education or less. The average length of service at their current job is 16 years (median is 14 years), with a standard deviation of 13 years, range: 0-50 years. Most respondents work in rural libraries (65%).

It has been revealed that personal resources are significantly negatively connected with a professional burnout both on an individual and on a group level. Age-related changes of a burnout index have a linear character, but at the same time they are expressed rather weakly. It is also shown that personal resources are not a variable related to the age dynamics of occupational burnout, because when personal resources are included in the regression model, the relationship between age and burnout remains the same. More detailed results of this research are presented in Appendix 1 of the thesis.

Empirical study no. 2

In the second study the age dynamics of some components of occupational burnout, namely, exhaustion, distancing, lowered emotional and cognitive control was investigated.

Study 2 involved 620 employees from 166 public libraries in different regions of the Russian Federation. Most of the sample of this study includes respondents from Study 1, but participants filled out the questionnaire anew. Sixty-six percent of the participants come from libraries in the Moscow region, 8% from Novosibirsk, 7% from Chelyabinsk, 12% from Yaroslavl, 4% from Astrakhan, and 3% from the Republic of Buryatia. The mean age of participants was 47 years (median: 49 years); standard deviation: 12 years; age range: 17-72. The majority of the sample is female (95%). Most respondents have a college degree (76%). Average years of current employment are 15 years (median is 12 years); standard deviation is 12 years; range: 0-50 years. Sixty-one percent of participants work in urban libraries, and 39% work in rural libraries.

By analogy with the first study, it is shown that personal resources (in the form of self-efficacy) are significantly negatively connected with each symptom of professional burnout. Personal resources are not connected with age dynamics of burnout on an individual level. The most expressed linear-negative dynamics was fixed for such symptoms as exhaustion and distancing, less expressed - for the decreased cognitive control. No significant changes were found on the scale of decreased emotional control. At the same time, regional peculiarities of age-related kinematics and dynamics of professional burnout were revealed: respondents not from Moscow region had insignificant age-related changes on the scales of decreased emotional and cognitive control. More detailed results of this research are presented in Appendix 2 of the thesis.

Empirical study no. 3

The third study considers individual rather than age differences in the dynamics of professional burnout. Taking into account the motivational component, potentially explaining the age-related changes in a burnout level, the dynamics of work motivation is added. Attention is paid to such forms of motivation as autonomous and controlled. Firstly, because when using these integral indices, a high reliability of measurement is achieved; secondly, they have a clear interpretation and are understandable for decision makers on the level of an organization. The role of the dynamic determinant is again performed by personal resources.

Study 3 included 266 employees from 5 public urban libraries. Eight percent of respondents lived in Astrakhan, 6% lived in the Republic of Buryatia, 18% lived in Chelyabinsk, 22% lived in the Moscow region, 15% lived in Novosibirsk, and 31% lived in Yaroslavl. The majority of respondents are women (88%); the majority have higher education (79%); average age is 45 years (median - 47 years), standard deviation is 13 years, range: 20-71 years. Average years of experience at current job, is 13 years (median is 10 years), standard deviation is 12 years, range: 0-49 years. There were 87 participants (33% of the sample) in all phases of the longitudinal study, those who missed at least one phase were 179 (67% of the sample).

The results of structural equation modeling revealed that in the perspective of one astronomical year the dynamics of professional burnout is characterized by some tendency to growth, autonomous motivation - by a significant decrease, controlled motivation - by absence of changes. It was shown that the initial level of personal resources is inversely proportional to the change of professional burnout: the respondents with more pronounced personal resources at the beginning of the research have a faster and more noticeable growth of professional burnout level. Neither motivation mediated the connection between personal resources and burnout, nor burnout mediated the connection between personal resources and motivation. Moreover, in an additional analysis, not included in the content of the described article, it was found that 37% of the

variance of professional burnout came from the stable, unchanging part, and 48% from the unstable, changing over time part. The remaining variance is decomposed into general method error (13%) and unexplained variation (2%). More detailed results of this study are presented in Appendix 3 of the thesis.

Conclusion

The thesis shows that professional burnout is a complex phenomenon that consists of physical and mental exhaustion, distancing, lowered emotional and cognitive control and is manifested both on individual and group levels. The obtained results confirm the tendency, found in other studies, to a lower burnout index in experienced employees in comparison to their novice colleagues. Age differences are also observed at two levels - individual and group. Relation of personal resources – self-efficacy, optimism, and hardiness – with occupational burnout is moderately negative and does not depend on the age of respondents.

Consideration of individual dynamics of professional burnout allowed us to understand that during the pandemic COVID-19 the level of professional burnout in public libraries increased with time, but this increase in average is relatively small. At the same time the increase of the index from the measurement no. 1 to the measurement no. 3 is noticeable. A similar trend has been observed in other countries and other professional groups.

It was found out that employees with higher personal resources at the beginning of the research have a stronger increase in professional burnout with the lapse of time. Besides, when controlling the personal resources, the individual dynamics of burnout is not associated with the dynamics of work motivation (neither autonomous, nor controlled) in the perspective of 1 year.

Based on age and individual variability it is shown that 1 year is an optimal time interval for constructing longitudinal studies of professional burnout.

When decomposing the variance of professional burnout, it was found out that 37% of the variation can be attributed to a stable component, 48% - to a changeable one, the rest part is an error of the general method and unexplained variance. In this connection it is necessary to emphasize that the obtained results do not allow us to attribute a burnout to a certain psychological category; in this connection it is more productive to investigate both its stable and changeable characteristics, which now is successfully done by means of longitudinal design and structural modeling method.

References

1. Anan'ev, B.G. (1980). *Izbrannye psihologicheskie trudy: V 2-h t. T. I. Moskva: «Pedagogika».*
2. Bakker, A. B., & de Vries, J. D. (2021). Job Demands–Resources theory and self-regulation: New explanations and remedies for job burnout. *Anxiety, Stress, & Coping, 34*(1), 1–21.
3. Barabanshchikova, V. V. (2016). *Professional'nye deformacii v professiyah innovacionnoj sfery* [Diss. ... doct. psih. n.]. M.: MGU.
4. Bausch, S., Michel, A., & Sonntag, K. (2014). How gender influences the effect of age on self-efficacy and training success. *International Journal of Training and Development, 18*(3), 171–187.
5. Bochkareva, E. N. (2016). Vzaimosvyaz' professional'nogo vygoraniya i emocional'nogo intellekta sotrudnikov kontaktnogo centra. *Psihologiya. ZHurnal Vysshej shkoly ekonomiki, 13*(3), 576–587.
6. Borsboom, D. (2008). Latent variable theory. *Measurement, 6*, 25–53.
7. Deci, E. L., Ryan, R. M. (2012). Self-determination theory. In P. A. M. Van Lange, A. W. Kruglanski, E. T. Higgins (Eds.). *Handbook of theories of social psychology* (pp. 416–436). Sage Publications Ltd.
8. Edú-Valsania, S., Laguía, A., & Moriano, J. A. (2022). Burnout: A review of theory and measurement. *International Journal of Environmental Research and Public Health, 19*(3), 1780.
9. Geiser, C., Götz, T., Preckel, F., & Freund, P. A. (2017). States and Traits. *European Journal of Psychological Assessment, 33*(4), 219–223.
10. Goh, J., Pfeffer, J., & Zenios, S. A. (2016). The relationship between workplace stressors and mortality and health costs in the United States. *Management Science, 62*(2), 608–628.
11. Han, J., Yin, H., Wang, J., & Zhang, J. (2020). Job demands and resources as

- antecedents of university teachers' exhaustion, engagement and job satisfaction. *Educational Psychology*, 40(3), 318–335.
12. Harwell, K. (2008) Burnout Strategies for Librarians. *Journal of Business & Finance Librarianship*, 13(3), 379–390.
13. Kok, N., van Gorp, J., Teerenstra, S., van der Hoeven, H., Fuchs, M., Hoedemaekers, C., & Zegers, M. (2021). Coronavirus disease 2019 immediately increases burnout symptoms in ICU professionals: a longitudinal cohort study. *Critical Care Medicine*, 49(3), 419–427.
14. Kotze, M. (2018). How job resources and personal resources influence work engagement and burnout. *African Journal of Economic and Management Studies*, 9(2), 148–164.
15. Leont'ev, D. A. (2016). Samoregulyaciya, resursy i lichnostnyj potencial. *Sibirskij psihologicheskij zhurnal*, (62), 18–37.
16. Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., Combs, G. M. (2006). Psychological capital development: toward a micro-intervention. *Journal of Organizational Behavior*, 27(3), 387–393.
17. Meseguer de Pedro, M., Fernández-Valera, M. M., García-Izquierdo, M., & Soler Sánchez, M. I. (2021). Burnout, psychological capital and health during COVID-19 social isolation: A longitudinal analysis. *International Journal of Environmental Research and Public Health*, 18(3), 1064.
18. Momdzhyan, K. H. (2015). Nomoteticheskoe poznanie v obshchestvennyh i gumanitarnyh naukah. *Epistemology & Philosophy of Science*, 14(3), 16–22.
19. Nalichaeva S.A., Dikaya L.G. (2013). Samoaktualizaciya kak vedushchaya determinanta sub"ektnoj samoregulyacii emocional'nogo vygoraniya pedagoga. V.V. Luk'yanov, A.B. Leonova, A.A. Oboznov, A.S. Chernyshev, N.E. Vodop'yanova (Red.), *Vygoranie i professionalizaciya* (ss. 124–143). Kursk. gos. un-t.
20. Nijp, H. H., Beckers, D. G., Geurts, S. A., Tucker, P. T., & Kompier, M. A. (2012).

- Systematic review on the association between employee worktime control and work-non-work balance, health and well-being, and job-related outcomes. *Scandinavian Journal of Work, Environment & Health*, 38(4), 299–313.
21. Pereira, H., Feher, G., Tibold, A., Costa, V., Monteiro, S., & Esgalhado, G. (2021). Mediating effect of burnout on the association between work-related quality of life and mental health symptoms. *Brain Sciences*, 11(6), 813.
22. Polyakova, O. (2014). The structure of professional deformation. *Procedia-Social and Behavioral Sciences*, 146, 420–425.
23. Prohorov, A. O., i dr. (2011). Psihologiya sostoyanij. URL: https://kpfu.ru/portal/docs/F_292350932/Uchebnik._elektronnyj.variant.pdf
24. R Core Team. (2017). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. URL <https://www.R-project.org/>
25. Revelle, W. (2022). *psych: Procedures for Psychological, Psychometric, and Personality Research*. Northwestern University, Evanston, Illinois.
26. Rosseel, Y. (2012). lavaan: An R Package for Structural Equation Modeling. *Journal of Statistical Software*, 48(2), 1–36.
27. RStudio Team. (2020). RStudio: Integrated Development for R. URL: <http://www.rstudio.com/>
28. Rubinstein, S.L. (1989). *Osnovy obshchej psihologii*. Moskva: Pedagogika.
29. Salanova, M., Schaufeli, W. B., Llorens Gumbau, S., Silla, P., & Grau Gumbau, R. M. (2000). Desde el burnout al engagement: ¿una nueva perspectiva? *Journal of Work and Organizational Psychology*, 16(2), 117–134.
30. Schaufeli, W. B., Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315.

31. Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71–92.
32. Schaufeli, W.B., De Witte, H., Desart, S. (2020). *Manual Burnout Assessment Tool (BAT) — Version 2.0*. KU Leuven, Belgium: Unpublished internal report. Retrieved from <https://burnoutassessmenttool.be/wp-content/uploads/2020/08/Test-Manual-BAT-English-version-2.0-1.pdf>
33. Schmukle, S. C., & Egloff, B. (2005). A latent state-trait analysis of implicit and explicit personality measures. *European Journal of Psychological Assessment*, 21(2), 100–107.
34. Skaalvik, E. M. & Skaalvik, S. (2020). Teacher burnout: relations between dimensions of burnout, perceived school context, job satisfaction and motivation for teaching. A longitudinal study. *Teachers and Teaching*, 26(7-8), 602–616.
35. Sokal, L. J., Eblie Trudel, L. G., & Babb, J. C. (2020). Supporting teachers in times of change: The job demands-resources model and teacher burnout during the COVID-19 pandemic. *International Journal of Contemporary Education*, 3(2), 67–74.
36. Steyer, R., Mayer, A., Geiser, C., & Cole, D. A. (2015). A theory of states and traits—Revised. *Annual Review of Clinical Psychology*, 11, 71–98.
37. Tarcan, G. Y., Tarcan, M., & Top, M. (2017). An analysis of the relationship between burnout and job satisfaction among emergency health professionals. *Applied Nursing Research*, 34, 40–47.
38. Vasilyuk, F. E., Zinchenko, V. P., Meshcheryakov, B. G., Petrovskij, V. A., Pruzhinin, B. I., SHCHedrino, T. G., Zinchenko, V. P. (2012). Metodologiya psihologii: problemy i perspektivy (pod obshch. red. T. G. SHCHedrinoj). Moskva, Sankt-Peterburg: Centr gumanitarnyh iniciativ.
39. Vodop'yanova, N. E., SHestakova, K. N. (2014). Pozitivnyj podhod k protivodejstviju professional'nomu vygoraniyu. *Gumanitarnye i social'nye nauki*, 3(35), 253–265.

40. Vokić, N. P. & Hernaus, T. (2015). *The triad of job satisfaction, work engagement and employee loyalty – The interplay among the concepts* (EFZG Working Papers Series No. 1507). Faculty of Economics and Business, University of Zagreb. Retrieved from <https://ideas.repec.org/p/zag/wpaper/1507.html>
41. Zhou, T., Xu, C., Wang, C., Sha, S., Wang, Z., Zhou, Y., ... & Wang, Q. (2022). Burnout and well-being of healthcare workers in the post-pandemic period of COVID-19: a perspective from the job demands-resources model. *BMC Health Services Research*, 22(1), 1–15.