

Emotions, Personality Traits and Metacognitions as Predictors of Students' Psychological Well-being in Contemporary Situation

Ekaterina G. Denisova

Don State Technical University, Rostov-on-Don, Russia

ORCID: <https://orcid.org/0000-0003-0240-8176>, e-mail: keithdenisova@gmail.com

Pavel N. Ermakov

Southern Federal University, Rostov-on-Don, Russia

ORCID: <https://orcid.org/0000-0001-8395-2426>, e-mail: paver@sfedu.ru

Irina V. Abakumova

Don State Technical University, Rostov-on-Don, Russia

ORCID: <https://orcid.org/0000-0003-2202-2588>, e-mail: abakira@mail.ru

Nadezhda V. Sylka

Don State Technical University, Rostov-on-Don, Russia

ORCID: <https://orcid.org/0000-0001-7324-8670>, e-mail: gramtysh99@gmail.com

This study aims to comprehensively explore the emotional, personal, and meta-cognitive predictors of students' psychological well-being. The article presents the results of identifying supporting and dysfunctional factors that affect the level of psychological well-being of the current generation of students. Study sample: 317 people subjects aged 18 to 45 years (average age 20.82) — undergraduate, graduate and postgraduate students. To measure these characteristics, the following methods were used: a short portrait questionnaire of the Big Five; methodology "Differential Scale of Emotions"; methodology for diagnosing the subjective well-being of the individual; Metacognitive Awareness Inventory; Metacognitive behavior self-assessment scale; test "Differential type of reflection"; Cognitive Emotion Regulation Questionnaire and the author's self-assessment questionnaire of metacognitive behavior "Metacognitive skills in the structure of educational and professional activities". It is shown that the level of subjective well-being differs significantly depending on the level of metacognitive involvement. A positive effect is also exerted by a high index of positive emotions, a greater level of extraversion and conscientiousness, and a low level of neuroticism. The data obtained can be helpful in developing programs for forming and reforming individual metacognitive strategies that contribute to successful adaptation and maintaining subjective well-being maintenance.

Keywords: psychological well-being, subjective well-being, metacognitive skills, emotions, personality traits.

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Эмоционально-личностные и метакогнитивные предикторы психологического благополучия студентов в современных условиях

Денисова Е.Г.

ФГБОУ ВО «Донской государственный технический университет» (ФГБОУ ВО ДГТУ),
г. Ростов-на-Дону, Российская Федерация
ORCID: <https://orcid.org/0000-0003-0240-8176>, e-mail: keithdenisova@gmail.com

Ермаков П.Н.

ФГАОУ ВО «Южный федеральный университет» (ФГАОУ ВО ЮФУ),
г. Ростов-на-Дону, Российская Федерация
ORCID: <https://orcid.org/0000-0001-8395-2426>, e-mail: paver@sfnu.ru

Абакумова И.В.

ФГБОУ ВО «Донской государственный технический университет» (ФГБОУ ВО ДГТУ),
г. Ростов-на-Дону, Российская Федерация
ORCID: <https://orcid.org/0000-0003-2202-2588>, e-mail: abakira@mail.ru

Сылка Н.В.

ФГБОУ ВО «Донской государственный технический университет» (ФГБОУ ВО ДГТУ),
г. Ростов-на-Дону, Российская Федерация
ORCID: <https://orcid.org/0000-0001-7324-8670>, e-mail: gramtysh99@gmail.com

Представлены материалы комплексного изучения эмоционально-личностных и метакогнитивных предикторов психологического благополучия обучающихся, направленного на выявление поддерживающих и дисфункциональных факторов, влияющих на уровень психологического благополучия студентов в современных условиях. Выборка исследования: 317 человек в возрасте от 18 до 45 лет (средний возраст — 20,82) — обучающиеся по программам бакалавриата, специалитета, магистратуры и аспирантуры. Для исследования заявленных показателей использовались следующие методики: короткий портретный опросник Большой пятерки; методика «Шкала дифференциальных эмоций»; методика диагностики субъективного благополучия личности; опросник метакогнитивной включенности в деятельность; Шкала самооценки метакогнитивного поведения; тест «Дифференциальный тип рефлексии»; опросник «Когнитивная регуляция эмоций» и авторская анкета самооценки метакогнитивного поведения «Метакогнитивные навыки в структуре учебно-профессиональной деятельности». Полученные данные показывают, что уровень субъективного благополучия значимо различается в зависимости от уровня метакогнитивной включенности. Установлено, что влияние также оказывают высокий индекс позитивных эмоций, более высокие показатели экстраверсии и сознательности, а также низкие значения нейротизма. Данные проведенного исследования

могут помочь в решении задач формирования и коррекции индивидуальных метакогнитивных стратегий, способствующих успешной адаптации и поддержанию субъективной удовлетворенности.

Ключевые слова: психологическое благополучие, субъективное благополучие, метакогнитивные навыки, эмоционально-личностные характеристики.

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Introduction

Students of all educational levels are subject to the negative effects of uncertainty and regularly face a number of difficulties that affect their success in mastering educational programs, their satisfaction with the process, well-being and psychological well-being. The specificity of educational activity lies in the impact on the student and the deep connection between academic success and his subjective characteristics. In modern conditions, there is an objective difficulty in taking into account and controlling external environmental factors, which in turn makes internal, subjective factors especially significant. It is these factors that can determine a certain level of functioning and adaptation of a person. At the same time, the education sector today, like many other areas, is in a state of continuous innovation. That, on the one hand, naturally affects, and on the other, depends on the well-being of the main subjects of educational activity. The relationship between the level of psychological well-being and self-efficacy and positive thinking has been studied and described [2; 15], as well as sustainability, mindfulness [24] and academic achievement [19]. However, the complexity and versatility of the very phenomenon of “psychological well-being”, as well as the transformational dynamism of the education, to this day leave the question of the factors and conditions for the students well-being open.

Since the situation of the assessment and the requirement to demonstrate a certain level of proficiency in educational content are themselves associated with an increase in tension and stress levels, the situation of knowledge control can be called one of the significant objective factors [2; 5; 12]. The features of pedagogical communication and the relationship of the student with the teaching staff are also significant. It is known that non-constructive communication in the educational process is a risk factor for reducing the well-being of life satisfaction and students [4; 8].

Recent studies suggest that subjective factors include the emotional state, personality traits, features of the motivational-value sphere, satisfaction with learning, affective-cognitive components, and metacognition [4; 13]. It has also been shown that students with a high level of resilience and mindfulness demonstrate higher levels of autonomy and self-acceptance, which, according to researchers, are components of psychological well-being [20].

Samokhvalova A.G. and colleagues on a sample of students of different profiles of education revealed a number of correlations of well-being with the parameters of motivation for creative self-realization, features of thinking, semantic sphere, communicative competence, creativity, reflexivity [12]. In a study with cadets of military universities, it was found that their psychological well-being depends on

the timing of adaptation in new conditions, the characteristics of the worldview, and the feeling of satisfaction with educational, official and personal activities [9]. Rusina S.A. revealed the particular importance of role self-assessment in the psychological well-being of students and found that confidence in the consistency of the student's personal qualities and the characteristics of educational and professional activities. The author also showed that compliance with all the norms and requirements of the educational institution, cause approval and self-recognition in a new social role, and this, in turn, leads to a positive change in the level of psychological well-being of students [11].

On metacognition, recent studies have shown the usefulness of assessing metacognitive skills in predicting the success of learning activities [14; 25], the role of metacognitive regulation in the context of communication is described [1], as well as the role of metacognitive involvement in the system of mental self-regulation of students [10].

Metacognition contains regulatory and reflective components. On the one hand, metacognitive skills cover the ability for self-regulation and self-organization in the process of cognition, on the other hand, the ability to track the process and progress of cognition, as well as self-check the results of activities. It has been established that the development of the abilities of metacognitive regulation of activity directly affects the management of students' own cognition [6]. Danilenko O.I. has identified and described a complex of anticipatory viability: foresight, self-regulation in educational activities and psychosomatic self-regulation. Anticipatory activity, according to the author, is one of the important predictors of academic performance and is interconnected with indicators of subjective well-being [5]. In general, the number of works devoted to metaconions is obviously increasing. Both the metacognitive processes themselves and the skills and strategies of metacognitive behavior are studied [10; 14]. At the same time, despite the rather obvious factorial potential, metacognition is often studied in the structure of educational activity in some isolation from the student's

personality, or is considered exclusively in the context of self-regulation.

Thus, in modern conditions, the importance of studying the psychological aspects of the quality of life, personal effectiveness and productivity of educational activities is increasing. The unifying category for these areas is the category of "psychological well-being", which we understand from a systemic standpoint and is understood as an integral socio-psychological entity, including the assessment and attitude of a person to his own life and personality, characterized by a subjective experience of satisfaction. Such an understanding allows, on the one hand, to some extent to use synonymously different terms in which it is customary to describe psychological well-being and its components, on the other hand, to simultaneously take into account these components and present them in a systematic way [7].

The main objective of this work was a comprehensive study of emotional-personal and metacognitive predictors of the psychological well-being of students.

Methods

The study involved students of higher educational institutions of the southern federal district of the Russian Federation - 317 people (68% female) aged 18 to 45 years (average age 20.82). Students of bachelor's and specialist's programs were 80% of the sample, 13% were enrolled in master's programs, 7% were postgraduate students. Data collection was carried out from March 15, 2022 to April 18, 2022 in the format of online testing. All respondents agreed to participate in the study, were informed about its objectives and notified of further use and publication of the results.

To collect the socio-psychological data and measure the use of metacognitive skills, the survey was used. Respondents were asked to indicate gender, age, level of education, field of study and form of study, as well as to assess the severity of educational stress and the success of coping with it. The author's self-assessment questionnaire for metacognitive behavior "Metacognitive skills in the structure

of educational and professional activities” contained 9 questions to assess the use and awareness of the main forms of metacognitive behavior (metaplanning, procedural skills and metacognitive control).

To measure these characteristics, the following methods were used: a short portrait questionnaire of the Big Five (B5-10, Egorova M.S. and Parshikova O.V., 2016); methodology «Differential Scale of Emotions» (SDE, adaptation of Leonova A.V. and Kapitsa M.S., 2003); methodology for diagnosing the subjective well-being of the individual (Shamionov R.M., Beskova T.V., 2018); Metacognitive Awareness Inventory (G. Shrou, R. Denison, adaptation by A.V. Karpov, 1994); Metacognitive behavior self-assessment scale (D. LaCosta, adaptation by A.V. Karpov, 1998); test “Differential type of reflection” (D.A. Leontiev, E.M. Lapteva, E.N. Osin, A.Zh. Salikhova, 2009); Cognitive Emotion Regulation Questionnaire by N. Garnefsky and V. Kraig (adapted by O.L. Pisareva, 2007).

Statistical methods included: Shapiro-Wilk test, analysis of covariance (ANCOVA), Kruskal-Wallis test. As a post hoc procedure, Dunn’s test with Holm’s correction for multiple comparisons was used. Statistical analysis of

the results obtained was carried out using the freely distributed JASP Computer software (Version 0.16, 2021).

Results

The majority of respondents believe that they face a relatively large amount of stressful situations at school (average for the sample - 5.74 out of 10 points) and cope with the academic load quite well (7.16 out of 10 points). At the same time, self-assessment of the levels of educational stress tends to inversely linear relationship with subjective ideas about academic success (Fig. 1). That is, the higher the students rate the level of academic stress, the worse, in their opinion, they cope with the academic load.

In the study of the main indicators of psychological well-being (Table 1), the highest results were found on the scale of social and normative well-being (mean value 3.87 points). It should be noted that the obtained value corresponds to a high level of this scale, which indicates high assessments of the compliance of their lives with social norms and moral values. The lowest indicators were found on the scale of hedonistic well-being (3.29), which indicates a reduced level of satisfaction of basic needs.

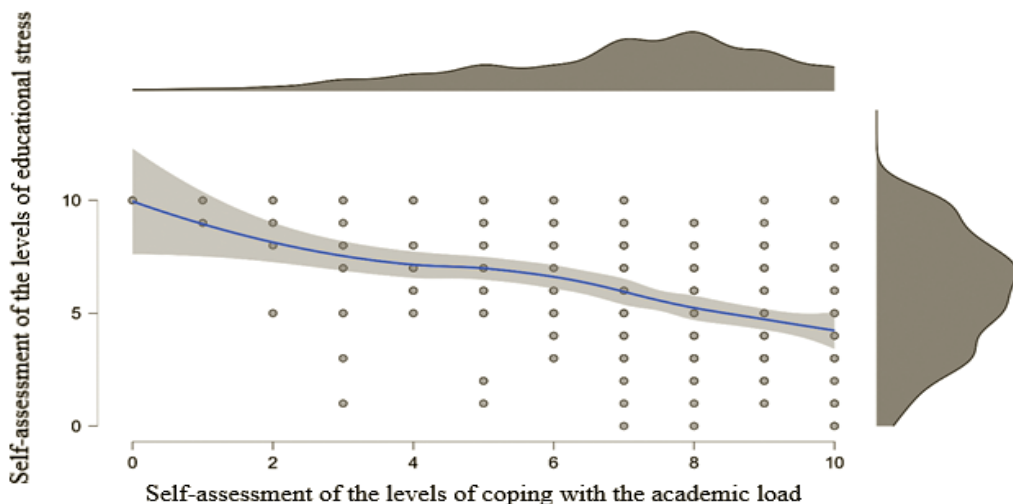


Figure 1. Analysis of the results of the self-assessment of the levels of educational stress and the success of coping with the academic load

At the same time, the established values on the scale of hedonistic well-being, as well as on the scales of emotional well-being (3.60), ego-well-being (3.40) and existential-activity well-being (3.56), correspond to the average values of the severity of these scales. The integral indicator of subjective well-being is also at the average level, which generally characterizes the sample positively.

To study the predictors of subjective well-being of students, an analysis of covariance (ANCOVA) was used, where the level of metacognitive involvement acted as a factor, and the degree of awareness of metacognitive skills and emotional and personal characteristics were considered as covariates (Table 2).

It was shown that the levels of metacognitive involvement ($F = 3.907$ at $p = 0.021$), extraversion ($F = 12.870$ at $p < 0.001$), consciousness ($F = 12.246$ at $p < 0.001$), neuroticism ($F = 9.770$ at $p = 0.002$), self-blame strategies ($F = 4.437$ at $p = 0.036$), positive refocusing ($F = 5.467$ at $p = 0.020$), and positive emotion index ($F = 47.152$ at $p < 0.001$) have a significant effect on well-being. There are also trends towards the significance of the effect for the strategies of positive revision ($F = 3.035$ at $p = 0.083$) and catastrophization ($F = 3.764$ at $p = 0.053$).

The results obtained indicate that the level of subjective well-being differs significantly depending on the level of metacognitive involvement (Kruskal-Wallis Test $H = 70.098$ at $p < 0.001$; Fig. 2).

Post hoc analysis using the Dunn method found that significant differences are observed

between all levels of metacognitive involvement (Table 3).

Analysis of the effect of personal characteristics and features of the emotional sphere showed that higher rates of subjective well-being are observed in students with a high index of positive emotions, with more pronounced extraversion, consciousness and low values of neuroticism. It has also been shown that positive refocusing during regulation of emotions has a direct effect on the level of well-being, while the strategy of self-blame has the opposite effect (Fig. 3).

Discussion

The described relationships between the subjective well-being of students and the levels of metacognitive involvement are confirmed by the results of numerous correlation studies of psychological well-being and the characteristics of self-regulation and reflection [10; 17; 26]. The relationship of personal characteristics with the level and components of psychological well-being has also been widely studied. Extraversion and prosocial behavior, along with links to psychological well-being, demonstrate a high potential for more successful adaptation and functioning of a person in many areas of activity [16; 21; 23]. On emotional regulation, it has been established that high indicators of emotional regulation reveal connections both with the level of psychological well-being and contribute to more adaptive options for coping with difficult situations [22]. At the same time, the connection of positive emotions with a high level of psychological

Table 1
The results of the study of the main components of the psychological well-being of students (N=317)

	Mean	Standard deviation
Emotional well-being	3.601	0.761
Existential-activity well-being	3.562	0.728
Ego well-being	3.404	0.829
Hedonistic well-being	3.298	0.760
Socio-normative well-being	3.870	0.620
Subjective well-being	3.547	0.629

Table 2

Results of ANCOVA for predictors of subjective well-being of students

	Sum of squares	Mean square	F	p
The level of metacognitive involvement	1.162	0.581	3.907	0.021
Extraversion	1.914	1.914	12.870	< 0.001
Agreeableness	0.321	0.321	2.160	0.143
Conscientiousness	1.822	1.822	12.246	< 0.001
Neuroticism	1.453	1.453	9.770	0.002
Decreased reflection over cognitive operations	0.002	0.002	0.012	0.912
Degree of awareness using metacognitive skills	0.340	0.340	2.285	0.132
Positive Emotion Index	7.014	7.014	47.152	< 0.001
Anxiety-Depressive Emotion Index Level	0.093	0.093	0.622	0.431
Self-accusation	0.660	0.660	4.437	0.036
Acceptance	0.025	0.025	0.167	0.683
Concentration	0.012	0.012	0.082	0.775
Positive refocus	0.813	0.813	5.467	0.020
Refocusing on planning	0.084	0.084	0.562	0.454
Positive revision	0.451	0.451	3.035	0.083
Place in perspective	0.067	0.067	0.450	0.503
Catastrophization	0.560	0.560	3.764	0.053
Accusation	0.106	0.106	0.711	0.400
Openness	0.016	0.016	0.109	0.742
Residuals	44.028	0.149		
F-statistic: 1.37, df2 = 314.000; p-value: 0.046				

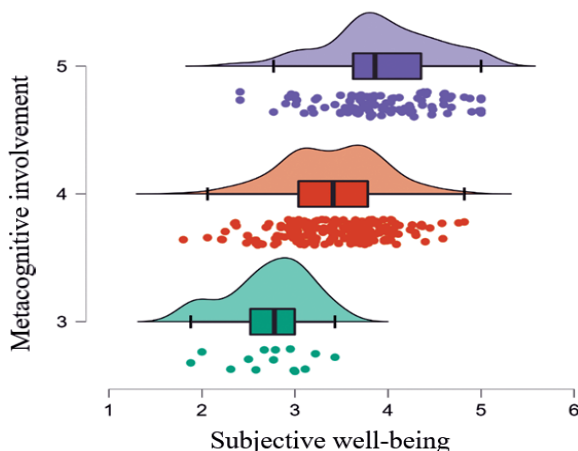


Figure 2. Analysis of the influence of the level of metacognitive involvement on the level of subjective well-being

Table 3

Dunn's Post Hoc Comparisons

Comparison by the level of metacognitive involvement	z	P _{holm}
Intermediate level (3) – Advanced level (4)	-3.654	< 0.001
Intermediate level (3) – High level (5)	-6.486	< 0.001
Advanced level (4) – High level (5)	-6.904	< 0.001

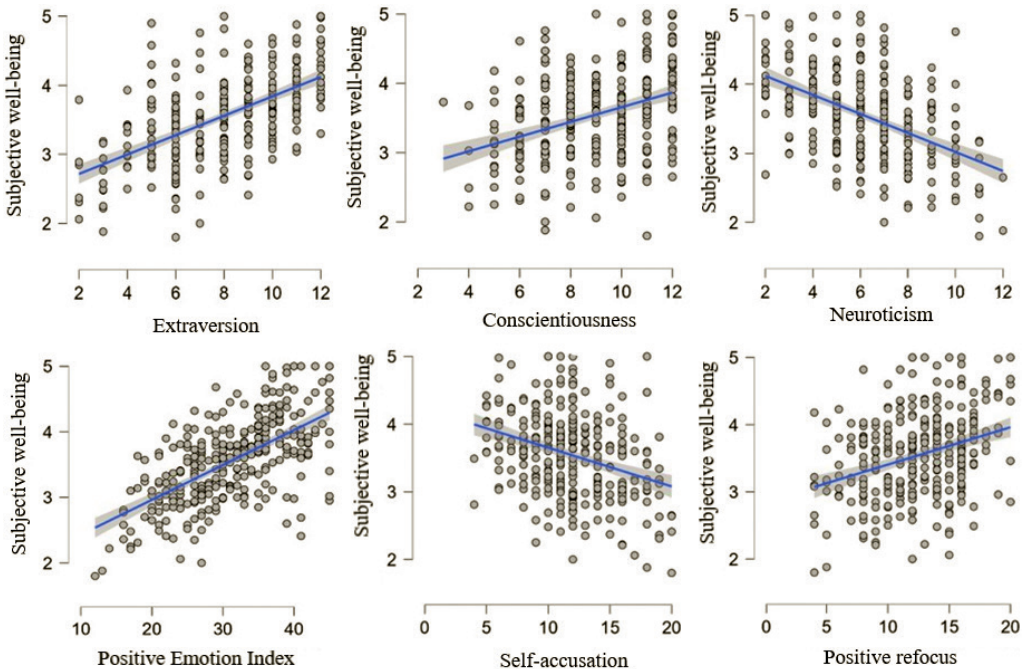


Figure 3. Analysis of the effect of personal characteristics and features of the emotional sphere

well-being seems to be quite obvious. It is also worth noting that positive refocusing and rethinking of the situation themselves are considered to be the most adaptive strategies for cognitive regulation of emotions, which is also supports our result [18].

Based on the above, we can conclude that the data obtained do not contradict the results of studies obtained both on Russian samples and in abroad studies. Our data clarify the place and content of the metacognitive component in the structure of the factors of psychological well-being of students. This determines

the scientific value and novelty of our results. It should also be noted that the purpose of the study was to identify universal predictors of student well-being, in this regard, the sample was analyzed in its entirety without dividing the respondents by gender, age and level of education, which is both a significant limitation of this work and represents a further perspective of the study.

Conclusions

The ability to plan, monitor and control the process of learning activities (metacognitive

involvement), as well as focus on the outside world (extraversion) and a higher degree of organization (conscientiousness) have a positive impact on the level of subjective well-being. At the same time, refocusing to the positive aspects of stressful situations and searching for a positive meaning of the events that have occurred for the purpose of personal growth or acquiring new experience has a strong supporting effect. The greatest destructive poten-

tial has a high level of neuroticism, a tendency to self-blame in stressful situations and a tendency to not take into account the prospect of using negative experience.

The results of this study can help in the development and correction of individual metacognitive strategies that contribute to successful adaptation and maintenance of subjective satisfaction in changing socio-political and economic conditions.

References

1. Berezhnova L.N., Fedoseeva I.A., Tarasov D. Yu. Ponimaniye kommunikativnogo povedeniya kursantov — vazhnoye napravleniye vospitatel'noy raboty [Understanding the communicative behavior of cadets is an important direction of educational work]. *Perspektivy nauki i obrazovaniya* [Prospects of science and education], 2019, no. 4(40), pp. 425—447. DOI:10.32744/pse.2019.4.33 (In Russ.).
2. Vodiakha S.A. Prediktory psikhologicheskogo blagopoluchiya studentov [Predictors of psychological well-being of students]. *Pedagogicheskoye obrazovaniye v Rossii* [Pedagogical education in Russia], 2013, no. 1, pp. 70—74. (In Russ.).
3. Volkova E.N., Miklyaeva A.V., Good V.V. Sub'ektivnyye predposylki psikhologicheskogo blagopoluchiya odarennykh podrostkov [Subjective prerequisites for psychological well-being of gifted adolescents]. *Psikhologicheskaya nauka i obrazovaniye = Psychological science and education*, 2022. Vol. 27, no. 1, pp. 92—103. DOI:10.17759/pse.2022270108 (In Russ.).
4. Gerasimova A.A., Kholmogorova A.B. Strategii sovladaniya, psikhologicheskoye blagopoluchiye i problemnoye ispol'zovaniye interneta v period pandemii [Coping strategies, psychological well-being and problematic use of the Internet during the pandemic]. *Psikhologicheskaya nauka i obrazovaniye = Psychological Science and education*, 2020. Vol. 25, no. 6, pp. 31—40. DOI:10.17759/pse.2020250603 (In Russ.).
5. Danilenko O.I. Antitsipatsionnaya sostoyatel'nost' kak prediktor sub'yektivnogo blagopoluchiya studentov [Anticipational consistency as a predictor of subjective well-being of students]. *Azimet nauchnykh issledovaniy: pedagogika i psikhologiya* [Azimet of scientific research: pedagogy and psychology], 2018. Vol. 3, no. 24, pp. 264—268. (In Russ.).
6. Kofeynikova Yu.L., Nikolaeva E.S., Sukhovershina Yu.V. Metakognitivnyye osobennosti studentov s polezavisimymi i polenezavisimymi kognitivnymi stilyami [Metacognitive features of students with utility-dependent and field-independent cognitive styles]. *Pedagogika i psikhologiya obrazovaniya* [Pedagogy and psychology of education], 2018, no. 2, pp. 103—116. (In Russ.).
7. Laktionova E.B., Matyushina M.G. Teoreticheskiy analiz podkhodov k issledovaniyu problemy pozitivnogo funktsionirovaniya lichnosti: schast'ye, psikhologicheskoye blagopoluchiye, sub'yektivnoye blagopoluchiye [Theoretical analysis of approaches to the study of the problem of positive functioning of the personality: happiness, psychological well-being, subjective well-being]. *Izvestiya Irkutskogo gosudarstvennogo universiteta. Seriya: Psikhologiya = [News of the Irkutsk State University. Series: Psychology]*, 2018. Vol. 26, pp. 77—88. DOI:10.26516/2304-1226.2018.26.77 (In Russ.).
8. Larionova M.A., Sukach L.I. Pedagogicheskoye obshcheniye v vuze kak faktor psikhologicheskogo blagopoluchiya studenta [Pedagogical communication in higher education as a factor of psychological well-being of a student]. *Mezhpokolencheskiye otnosheniya: sovremennyy diskurs i strategicheskiye vybory v psikhologo-pedagogicheskoy nauke i praktike* [Intergenerational relations: modern discourse and strategic choices in psychological and pedagogical science and practice], 2020, no. 1, pp. 217—220. DOI:10.24411/9999-047A-2020-00061 (In Russ.).
9. Opekina T.P. Kognitivnyye prediktory psikhologicheskogo blagopoluchiya i udovletvorennosti zhizn'yu muzhchin-kursantov voyennykh vuzov [Cognitive predictors of psychological well-being and life satisfaction of male cadets of military universities]. *Vestnik Kostromskogo gosudarstvennogo universiteta. Seriya: Pedagogika. Psikhologiya. Sotsiokinetika* [Bulletin of Kostroma State University. Series: Pedagogy. Psychology. Sociokinetics], 2020. Vol. 26, no. 3, pp. 54—61. DOI:10.34216/2073-1426-2020-26-3-54-61 (In Russ.).
10. Perikova E.I., Byzova V.M., Lovyagina A.E. Metakognitivnaya vlyuchennost' v sisteme psikhicheskoy samoregulyatsii studentov [Metacognitive involvement in the system of mental self-regulation of students]. *Sibirskiy Psikhologicheskii Zhurnal* [Siberian Psychological Journal], 2019, no. 73, pp. 126—140. DOI:10.17223/17267080/73/8 (In Russ.).

11. Rusina S.A. Psikhologicheskoye blagopoluchiye studentov s raznym urovnem rolevoy samootsenki [Psychological well-being of students with different levels of role self-esteem]. *Vestnik Yuzhno-Ural'skogo gosudarstvennogo universiteta. Seriya: Psikhologiya [Bulletin of the South Ural State University. Series: Psychology]*, 2015. Vol. 8, no. 4, pp. 76—83. DOI:10.14529/psy150409 (In Russ.).
12. Samokhvalova A.G., Tikhomirova E.V., Vishnevskaya O.N., Shipova N.S., Asriyan E.V. Strukturno-funktsional'naya model' psikhologicheskogo blagopoluchiya sovremennykh studentov [Structural and functional model of psychological well-being of modern students]. *Rossiyskiy psikhologicheskii zhurnal [Russian Psychological Journal]*, 2021. Vol. 18, no. 4, pp. 47—63. DOI:10.21702/rpj.2021.4.4 (In Russ.).
13. Khachaturova M.R., Yerofeeva V.G., Bardadymov V.A. Obraz myshleniya i sub'yektivnoye blagopoluchiye obuchayushchikhsya v period «stanoviyashcheysya vzroslosti» [The way of thinking and subjective well-being of students in the period of "becoming adulthood"]. *Psikhologicheskaya nauka i obrazovaniye = Psychological science and education*, 2022. Vol. 27, no. 1, pp. 121—135. DOI:10.17759/pse.2022270110 (In Russ.).
14. Chernokova T.E. Metapoznaniye: problemy struktury, tipologii, razvitiya [Metacognition: problems of structure, typology, development]. *Vestnik Severnogo (Arkticheskogo) federal'nogo universiteta imeni M.V. Lomonosova [Bulletin of the Northern (Arctic) Federal University named after M.V. Lomonosov]*, 2014, pp. 169. (In Russ.).
15. Alkhatib M.A.H. Investigate the Relationship between Psychological Well-Being, Self-Efficacy and Positive Thinking at Prince Sattam Bin Abdulaziz University. *International Journal of Higher Education*, 2020. Vol. 9, no. 4, p. 138. DOI:10.5430/ijhe.v9n4p138
16. Chan H.H.-K., Kwong H.Y.C., Shu G.L.F., Ting C.Y., Lai F.H.-Y. Effects of Experiential Learning Programmes on Adolescent Prosocial Behaviour, Empathy, and Subjective Well-being: A Systematic Review and Meta-Analysis. *Frontiers in Psychology*, 2021. Vol. 12, pp. 709699. DOI:10.3389/fpsyg.2021.709699
17. Czyzowska N., Gurba E. Does Reflection on Everyday Events Enhance Meaning in Life and Well-Being among Emerging Adults? Self-Efficacy as Mediator between Meaning in Life and Well-Being. *International Journal of Environmental Research and Public Health*, 2021. Vol. 18, no. 18, pp. 9714. P. 1—13. DOI:10.3390/ijerph18189714
18. Garnefski N., Kraaij V. The Cognitive Emotion Regulation Questionnaire. *European Journal of Psychological Assessment*, 2007, no. 23, pp. 141—149. DOI:10.1027/1015-5759.23.3.141
19. Gokalp M. Investigation of relationship between subjective well-being levels and academic achievements of university students according to various variables. *Cypriot Journal of Educational Sciences*, 2020. Vol. 15, no 3, pp. 532—539. DOI:10.18844/cjes.v15i3.4930
20. Harding T., Lopez V., Klainin-Yobas P. Predictors of Psychological Well-Being among Higher Education Students. *Psychology*, 2019. Vol. 10, no 4, pp. 578—594. DOI:10.4236/psych.2019.104037
21. Kuijpers E., Pickett J., Wille B., Hofmans J. Do You Feel Better When You Behave More Extraverted Than You Are? The Relationship Between Cumulative Counterdispositional Extraversion and Positive Feelings. *Personality and Social Psychology Bulletin*, 2022. Vol. 48, no 4, pp. 606—623. DOI:10.1177/01461672211015062
22. Low R.S.T., Overall N.C., Chang V.T., Henderson A.M.E., Sibley C.G. Emotion regulation and psychological and physical health during a nationwide COVID-19 lockdown. *Emotion*, 2021. Vol. 21, no 8, pp. 1671—1690. DOI:10.1037/emo0001046
23. Osamika B.E., Lawal T., Osamika A.E., Hounhanou A.J.V., Laleye M. Personality characteristics, psychological wellbeing and academic success among university students. *International Journal of Research in Education and Science (IJRES)*, 2021. Vol. 7, no 3, pp. 805—821. DOI:10.46328/ijres.1898
24. Pidgeon A.M., Keye M. Relationship between Resilience, Mindfulness, and Psychological Well-Being in University Students. *International Journal of Liberal Arts and Social Science*, 2014. Vol. 2, no 5, pp. 27—32.
25. Schraw G., Crippen K.J., Hartley K. Promoting Self-Regulation in Science Education: Metacognition as Part of a Broader Perspective on Learning. *Research in Science Education*, 2006, no 36, pp. 111—139. DOI:10.1007/s11165-005-3917-8
26. Wang X., Zhang J., Wu S., Xiao W., Wang Z., Li F., Liu X., Miao D. Effects of meaning in life on subjective well-being: The mediating role of self-efficacy. *Social Behavior and Personality: An international journal*, 2021. Vol. 49, no 4, pp. 1—11. DOI:10.2224/sbp.9975

Литература

1. Бережнова Л.Н., Федосеева И.А., Тарасов Д.Ю. Понимание коммуникативного поведения курсантов — важное направление воспитательной работы // Перспективы науки и образования. 2019. № 4(40). С. 425—447. DOI:10.32744/pse.2019.4.33
2. Водяжа С.А. Предикторы психологического благополучия студентов // Педагогическое образование в России. 2013. № 1. С. 70—74.
3. Волкова Е.Н., Микляева А.В., Хороших В.В. Субъективные предпосылки психологического благополучия одаренных подростков // Психологическая наука и образование. 2022. Т. 27. № 1. С. 92—103. DOI:10.17759/pse.2022270108
4. Герасимова А.А., Холмогорова А.Б. Стратегии совладания, психологическое благополучие и проблемное использование интернета в период пандемии // Психологическая наука и образование.

2020. Том 25. № 6. С. 31—40. DOI:10.17759/pse.2020250603
5. Даниленко О.И. Антиципационная состоятельность как предиктор субъективного благополучия студентов // Азимут научных исследований: педагогика и психология. 2018. Т. 3. № 24. С. 264—268.
6. Кофейникова Ю.Л., Николаева Е.С., Суховершина Ю.В. Метакогнитивные особенности студентов с полнезависимыми и полнезависимыми когнитивными стилями // Педагогика и психология образования. 2018. № 2. С. 103—116.
7. Лактионова Е.Б., Матюшина М.Г. Теоретический анализ подходов к исследованию проблемы позитивного функционирования личности: счастье, психологическое благополучие, субъективное благополучие // Известия Иркутского государственного университета. Серия: Психология. 2018. Т. 26. С. 77—88. DOI:10.26516/2304-1226.2018.26.77
8. Ларионова М.А., Сукач Л.И. Педагогическое общение в вузе как фактор психологического благополучия студента // Межпоколенческие отношения: современный дискурс и стратегические выборы в психолого-педагогической науке и практике. 2020. № 1. С. 217—220. DOI:10.24411/9999-0474-2020-00061
9. Опекина Т.П. Когнитивные предикторы психологического благополучия и удовлетворенности жизнью мужчин-курсантов военных вузов // Вестник Костромского государственного университета. Серия: Педагогика. Психология. Социокинетика. 2020. Т. 26. № 3. С. 54—61. DOI:10.34216/2073-1426-2020-26-3-54-61
10. Перикова Е.И., Бызова В.М. Метакогнитивные процессы в учебной деятельности девушек и женщин: личностный подход // Вестник Вятского государственного университета. 2020. № 2. DOI:10.25730/VSU.7606.20.031
11. Русина С.А. Психологическое благополучие студентов с разным уровнем ролевой самооценки // Вестник Южно-Уральского государственного университета. Серия: Психология. 2015. Т. 8. № 4. С. 76—83. DOI:10.14529/psy150409
12. Самохвалова А.Г., Тихомирова Е.В., Вишневецкая О.Н., Шипова Н.С., Асриян Э.В. Структурно-функциональная модель психологического благополучия современных студентов // Российский психологический журнал. 2021. Т. 18. № 4. С. 47—63. DOI:10.21702/grj.2021.4.4
13. Хачатурова М.Р., Ерофеева В.Г., Бардадымов В.А. Образ мышления и субъективное благополучие обучающихся в период «становящейся взрослости» // Психологическая наука и образование. 2022. Т. 27. № 1. С. 121—135. DOI:10.17759/pse.2022270110
14. Чернокова Т.Е. Метапознание: проблемы структуры, типологии, развития // Вестник Северного (Арктического) федерального университета имени М.В. Ломоносова. 2014. 169 с.
15. Alkhatib M.A.H. Investigate the Relationship between Psychological Well-Being, Self-Efficacy and Positive Thinking at Prince Sattam Bin Abdulaziz University // International Journal of Higher Education. 2020. Vol. 9. № 4. P. 138. DOI:10.5430/ijhe.v9n4p138
16. Chan H.H.-K., Kwong H.Y.C., Shu G.L.F., Ting C.Y., Lai F.H.-Y. Effects of Experiential Learning Programmes on Adolescent Prosocial Behaviour, Empathy, and Subjective Well-being: A Systematic Review and Meta-Analysis // Frontiers in Psychology. 2021. Vol. 12. 709699. DOI:10.3389/fpsyg.2021.709699
17. Czyzowska N., Gurba E. Does Reflection on Everyday Events Enhance Meaning in Life and Well-Being among Emerging Adults? Self-Efficacy as Mediator between Meaning in Life and Well-Being // International Journal of Environmental Research and Public Health. 2021. Vol. 18. № 18. 9714. P. 1—13. DOI:10.3390/ijerph18189714
18. Garmefski N., Kraaij V. The Cognitive Emotion Regulation Questionnaire // European Journal of Psychological Assessment. 2007. № 23. P. 141—149. DOI:10.1027/1015-5759.23.3.141
19. Gokalp M. Investigation of relationship between subjective well-being levels and academic achievements of university students according to various variables // Cypriot Journal of Educational Sciences. 2020. Vol. 15. № 3. P. 532—539. DOI:10.18844/cjes.v15i3.4930
20. Harding T., Lopez V., Klainin-Yobas P. Predictors of Psychological Well-Being among Higher Education Students // Psychology. 2019. Vol. 10. № 4. P. 578—594. DOI:10.4236/psych.2019.104037
21. Kuijpers E., Pickett J., Wille B., Hofmans J. Do You Feel Better When You Behave More Extraverted Than You Are? The Relationship Between Cumulative Counterdispositional Extraversion and Positive Feelings // Personality and Social Psychology Bulletin. 2022. Vol. 48. № 4. P. 606—623. DOI:10.1177/01461672211015062
22. Low R.S.T., Overall N.C., Chang V.T., Henderson A.M.E., Sibley C.G. Emotion regulation and psychological and physical health during a nationwide COVID-19 lockdown // Emotion. 2021. Vol. 21. № 8. P. 1671—1690. DOI:10.1037/emo0001046
23. Osamika B.E., Lawal T., Osamika A.E., Hounhanou A.J.V., Laleye M. Personality characteristics, psychological wellbeing and academic success among university students // International Journal of Research in Education and Science (IJRES). 2021. Vol. 7. № 3. P. 805—821. DOI:10.46328/ijres.1898
24. Pidgeon A.M., Keye M. Relationship between Resilience, Mindfulness, and Psychological Well-Being in University Students // International Journal of Liberal Arts and Social Science. 2014. Vol. 2. № 5. P. 27—32.

25. Schraw G., Crippen K.J., Hartley K. Promoting Self-Regulation in Science Education: Metacognition as Part of a Broader Perspective on Learning // *Research in Science Education*. 2006. № 36. P. 111—139. DOI:10.1007/s11165-005-3917-8
26. Wang X., Zhang J., Wu S., Xiao W., Wang Z., Li F., Liu X., Miao D. Effects of meaning in life on subjective well-being: The mediating role of self-efficacy // *Social Behavior and Personality: An international journal*. 2021. Vol. 49. № 4. P. 1—11. DOI:10.2224/sbp.9975

Information about the authors

Ekaterina G. Denisova, PhD in Psychology, Associate Professor, Department of Psychophysiology and Clinical Psychology, Faculty of Psychology, Pedagogy and Defectology, Don State Technical University, Rostov-on-Don, Russia, ORCID: <https://orcid.org/0000-0003-0240-8176>, e-mail: keithdenisova@gmail.com

Pavel N. Ermakov, Doctor of Biology, Professor, Member of the Russian Academy of Education, Head of the Department of Psychophysiology and Clinical Psychology, Head of the Southern Federal Regional Research Centre of the Russian Academy of Education, Southern Federal University, Rostov-on-Don, Russia, ORCID: <https://orcid.org/0000-0001-8395-2426>, e-mail: paver@sfedu.ru

Irina V. Abakumova, Doctor of Psychology, Professor, Member of the Russian Academy of Education, Dean of the Faculty of Psychology, Pedagogy and Defectology, Don State Technical University, Rostov-on-Don, Russia, ORCID: <https://orcid.org/0000-0003-2202-2588>, e-mail: abakira@mail.ru

Nadezhda V. Sylka, Student, Don State Technical University, Rostov-on-Don, Russia, ORCID: <https://orcid.org/0000-0001-7324-8670>, e-mail: gramtysh99@gmail.com

Информация об авторах

Денисова Екатерина Геннадьевна, кандидат психологических наук, доцент кафедры «Психофизиология и клиническая психология», факультет «Психология, педагогика и дефектология», ФГБОУ ВО «Донской государственный технический университет» (ФГБОУ ВО ДГТУ), г. Ростов-на-Дону, Российская Федерация, ORCID: <https://orcid.org/0000-0003-0240-8176>, e-mail: keithdenisova@gmail.com

Ермаков Павел Николаевич, доктор биологических наук, профессор, академик РАО, заведующий кафедрой психофизиологии и клинической психологии, руководитель ЮРНЦ РАО, ФГАОУ ВО «Южный федеральный университет» (ФГАОУ ВО ЮФУ), г. Ростов-на-Дону, Российская Федерация, ORCID: <https://orcid.org/0000-0001-8395-2426>, e-mail: paver@sfedu.ru

Абакумова Ирина Владимировна, доктор психологических наук, профессор, академик РАО, декан факультета «Психология, педагогика и дефектология», ФГБОУ ВО «Донской государственный технический университет» (ФГБОУ ВО ДГТУ), г. Ростов-на-Дону, Российская Федерация, ORCID: <https://orcid.org/0000-0003-2202-2588>, e-mail: abakira@mail.ru

Сылка Надежда Валерьевна, студент, ФГБОУ ВО «Донской государственный технический университет» (ФГБОУ ВО ДГТУ), г. Ростов-на-Дону, Российская Федерация, ORCID: <https://orcid.org/0000-0001-7324-8670>, e-mail: gramtysh99@gmail.com

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