

[Polunina N.V., Razumovsky A.Y., Savvina V.A., Varfolomeev A.R., Nikolaev V.N. The frequency of congenital anomalies as a component of the index of health of children population of the region.

Russian Bulletin of Perinatology and Pediatrics. 2014; 5: 47-51.

6. Шарыкин А.С. Врожденные пороки сердца: проблемы плода и новорожденного ребенка

ка / А.С. Шарыкин // *Consilium medicum.* 2012; 3: 54-58 [Sharikin A.S. Congenital heart defects: problems of the fetus and newborn child. *Consilium medicum.* 2012; 3: 54-58.

DOI 10.25789/YMJ.2021.73.23

A.N. Savostyanov, N.V. Borisova, S.S. Tamozhnikov, A.G. Karpova, E.B. Afanaseva

PSYCHOLOGICAL MARKERS OF THE RISK OF DEPRESSION DEVELOPMENT IN THE INDIGENOUS POPULATION AND MIGRANTS IN THE REPUBLIC OF SAKHA (YAKUTIA)

The aim of the study was to compare psychological markers of the depressive disorder in indigenous people and migrants in the polar regions of Yakutia. The study involved 50 healthy students of a medical college in the Khandyga village and 50 medical students who moved to Yakutia from the southern regions. The migrants were examined twice – during one month after the move and six months after the move. All participants completed a set of psychological tests that assessed their psychological personality traits and degree of depression. In all participants, the degree of depression positively correlated with scores of neuroticism and negatively with scores of extraversion, collectivism, and social activity. The first examination showed that migrants had an increased level of trait and state anxiety in comparison with the local people, as well as an increased degree of depression. Upon re-examination, the level of anxiety in all migrants significantly decreased. The dynamics of the degree of depression in the migrant group was multidirectional. For a majority of migrants, the degree of depression decreased significantly, but for 11 of them it increased. The group of migrants with an increased level of depression was characterized by low values of collectivism and family attachment in comparison with migrants whose degree of depression decreased. In general, according to the results of the study, it can be concluded that an increased risk of depression in both the indigenous population and among migrants was associated with low scores on many scales of psychological tests, reflecting the level of social activity of an individual. The study is executed under support of grants of RFBR № 18-415-140021 и 18-29-13027. Study of A.N. Savostyanov also supported by budgetary project of ICG SB RAS № 0324- 2019-0040-C-01.T.

Keywords: predisposition to depression, migrants, polar region, neuroticism, collectivism, extraversion

SAVOSTYANOV Alexander N. - Candidate of Biological Sciences, Doctor of Philosophy, Associate Professor, Leading Researcher at the Research Institute of Physiology and Fundamental Medicine, Head of the Laboratories of Psychological Genetics of the ICG SB RAS, Professor and Head of the Department of Fundamental and Applied Linguistics at the Humanitarian Institute of Novosibirsk State University, e - mail: a-sav@mail.ru, <http://orcid.org/0000-0002-3514-2901>; **BORISOVA Natalya V.** - Doctor of Medical Sciences Sci., Professor, Department of Normal and Pathological Physiology, Medical Institute, Federal State Autonomous Educational Institution of Higher Education 'M.K. Ammosov North-Eastern Federal University', e-mail: Borinat@yandex.ru, <http://orcid.org/0000-0001-9583-3424>; **TAMOZHNIKOV Sergey S.** - Researcher, Research Institute of Physiology and Fundamental Medicine, Novosibirsk, e-mail: s.tam@physiol.ru, <http://orcid.org/0000-0002-7991-861> X; **KARPOVA Alexandra G.** - post-graduate student of the Medical Institute, Federal State Autonomous Educational Institution of Higher Education 'M.K. Ammosov North-Eastern Federal University', e-mail: karpova74@list.ru, tel. 89841138784, <http://orcid.org/0000-0001-9622-8496>; **AFANASYEVA Elena B.** - postgraduate student of the Medical Institute, Federal State Autonomous Educational Institution of Higher Education 'M.K. Ammosov North-Eastern Federal University', e-mail: e.cassi@mail.ru, tel. 89243674369, <http://orcid.org/0000-0001-7566-6315>

Introduction. Adaptation to extreme climates is often accompanied by increase in the risk of affective pathology, including disorders of the anxiety-depressive spectrum [5, 6]. Early diagnosis of such disorders is necessary for their timely prevention and reduction of negative consequences from morbidity. Until recently, most medical research on depression has focused on comparing clinical patients with healthy controls. Such comparisons have several significant drawbacks. First of all, they do not allow identifying those people who, for some reason, hide the symptoms of depression from others and do not seek medical help. In addition, clinical examinations are carried out on patients who are already receiving medication, which does not allow identifying the underlying causes of depression, since the effect of therapy distorts the ratio of various factors that determine the predisposition to the disease [31]. In this regard, it seems relevant to conduct research aimed at establishing markers of predisposition to depression in healthy people [13, 14, 20, 32].

Most often, as psychological markers of depression, individual assessments are considered on various scales of psychological tests proposed in the frame-

work of the "Big Five" concept developed by G. Ayseng [15] and his followers [11, 26, 33, 27]. In a series of studies carried out under the guidance of G.G. Knyazeva [2, 4, 22] it was shown that such factor of the "Big Five" as neuroticism and its facets has a positive correlation with the risk of depression, and the assessments of extraversion and, in particular, agreeableness, on the contrary, negatively correlate with the risk of depression. With according most neurobiological concepts personal characteristics, markers "Big Five" primarily determined genetically [11, 26], and slightly dependent on the formation conditions and the residence of the individual. On the contrary, sociocultural factors related to the choice of various moral and ethical regulators of human behavior turn out to be highly dependent on the social environment and can change during a person's life. Indicators of individualism and collectivism are often cited as such socio-culturally defined markers of depression [33, 17]. These two concepts relate primarily to the method of self-assessment of a person in the context of social relations. Collectivism reflects the desire of the individual to determine his own properties through belonging to a community (family, state, religious group, etc.). Individualism, on the contrary, is as-

sociated with the desire to define one's personality regardless of the collective. It should be noted that at the cultural level, collectivism and individualism are opposed characteristics [29]. However, at the level of individuals, these two indicators turn out to be orthogonal to each other, i.e. personal assessments of the severity of individualism and collectivism using psychological tests are not statistically related to each other [30].

A number of studies have shown that collectivism and individualism are associated with neurophysiological indicators reflecting the functional state of the so-called structures of the "social brain" [23]. It has also been shown that these two psychological indicators change the relationship between behavioral, psychogenetic and neurophysiological markers of depression in non-clinical subjects [21, 25]. However, these relationships are not permanent and can change in different communities. Thus, for the majority of Asian samples, a significant negative dependence of the risk of developing depression on the level of collectivism was shown [18]. At the same time, G.G. Knyazev et al. showed that in Russia a high level of collectivism does not reduce the risk of developing depression [24]. Thus, the question of the role of sociocultural personality traits in the formation of the risk of depression remains open.

The aim of this study is to investigate the relationship between psychological markers of depression among healthy young people who have moved on long-term residence in a circumpolar area of the Republic of Sakha (Yakutia) from the southern regions, compared with people constantly residing in these regions. Severity of depression implicit symptoms has been well appreciated and we use the psychological techniques Beck and questionnaires for adults Achenbach. As psychological markers of depression, we have selected both the traditional indicators of the "Big Five" and the values of individual assessments of individualism and collectivism and related scales. We assumed that the selected indicators not only correlate with the severity of depressive symptoms in the nonclinical subjects we examined, but are also associated with the long-term dynamics of the severity of depression in migrants during their long-term residence in Yakutia.

Materials and methods. Survey participants: The survey involved 50 migrants who arrived in Yakutsk in 2018 (all men, average age 24.1±3.2 years). The

migrants were examined twice. The first survey took place in September-October 2018, about a month after the migrants moved to Yakutsk, and the re-examination took place in April 2019, i.e. six months after their move. The first survey involved 50 migrants. However, three people subsequently left Yakutia and did not take part in the second survey. Most of the migrant participants arrived in Yakutia from the republics of Central Asia (Tajikistan - 28 people, Kyrgyzstan - 11 people, Turkmenistan - 4 people, Uzbekistan - 2 people). In addition, some migrants came to Yakutia from Egypt (5 people), Zambia (1 person) and Peru (1 person). All of the migrant participants were medical students at the North-Eastern Federal University. All migrants either received higher education in Russian, or were full-time students at NEFU, studying in Russian-language programs. As a control sample in 2019, a group of medical college students in the Khandyga village of the Tomponsky district of Yakutia (23 men, 27 women, average age 25.2 ± 3.1 years), which is officially classified as a region with an Arctic climate. All people gave their voluntary written consent to participate in the survey. The survey was conducted in accordance with the ethical standards of the Declaration of Helsinki on Biomedical Ethics. The survey protocols were reviewed and approved by the ethics committee of NEFU.

Psychological testing: All survey participants underwent psychological testing using a package of questionnaires and an implicit association test. To measure personality within the framework of the five-factor model, the "Big Five Factor Markers" questionnaire was used [10]. In addition, we used the well-known questionnaires for measuring personal anxiety (State Trait Anxiety Inventory) [7] and aggression (Aggression Scale) [10]. Emotional intelligence was measured using the questionnaire K. Barchard, translated and validated by Knyazev et al. [3]. To assess the severity of individualistic and collectivist tendencies, two questionnaires were used. The first is the well-known questionnaire of Singelis's (Self-Construal Scale) [28] collective and independent self-concept. The second questionnaire measures the affiliation tendencies selectively towards the next of kin, or a loved one (RISC, The Relational-Interdependent Self-Construal) [12]. Both questionnaires have been translated and validated [1]. Depressive symptomatology used the Beck's questionnaire (Beck depression inventory) [9], the Achenbach's questionnaire for adults

on the severity of a wide range of psychopathological symptoms (Adult Behavior Checklist) [8], and the WHO Self-Reporting Questionnaire (SRQ20) [16]. The Holmes and Reich questionnaire [19] was also used to measure sensitivity to stress and the presence of stress in the environment. It should be noted that the results of psychological testing were thoroughly checked when re-examining migrants. According to the indicators of personality scales, which should not change under the influence of adaptation (extraversion, neuroticism, responsibility, intelligence, etc.), high values of the coefficients of intrasubjective self-correlation were revealed ($r > 0.95$; $p < 0.0001$), which indicates that the participants understood the questions of the tests and about the meaningfulness of filling them out.

Statistical processing of results. For the definition of the relationship between the risk of developing depression and personality and psychological characteristics of people calculated Pearson's correlation coefficients between individual scores of different scales of personality questionnaires and assessments on various scales of depression questionnaire Beck's and Achenbach's questionnaire scales. However, we found that the scales of the Beck's and Achenbach's questionnaires were highly correlated with each other ($r > 0.4$; $p < 0.03$). Therefore, within the framework of this publication, only correlations of assessments of personality scales with assessments according to the total Beck's scale will be presented.

To compare migrants and the indigenous population, a one-way ANOVA was used with the "group" factor (migrants vs indigenous population). For intragroup comparisons of migrants, repeated measures ANOVA was used with the factor "adaptation period" (first survey vs second survey).

Results. Correlation of the severity of depression with personality traits in both groups. In both groups of the patients, severity of depression implicit symptoms, rated by Beck's questionnaire, showed a highly significant positive correlation with personality traits of the questionnaire: neuroticism ($r = 0.43$; $p < 0.0001$) and its anxiety ($r = 0.34$; $p < 0.0001$), instability to uncertainty ($r = 0.46$; $p < 0.0001$), psychoticism ($r = 0.30$; $p < 0.0001$) and impulsivity ($r = 0.28$; $p = 0.001$) and irresponsibility ($r = 0.29$; $p < 0.0001$). Furthermore, the severity of depression positively correlated well with the level of neuroticism by questionnaire "Big Five markers" ($r = 0.24$; $p = 0.003$), as well as the scale of anger ($r = 0.25$; $p = 0.002$).

and hostility ($r = 0.19$; $p = 0.002$) of the Bass-Perry's questionnaire.

Negative correlations were found between the severity of depression and the level of extraversion according to the Eiseng's test ($r = -0.25$; $p = 0.002$) and its activity facet ($r = -0.26$; $p = 0.009$), as well as for extraversion ($r = -0.36$; $p < 0.00010$), friendliness ($r = -0.24$; $p = 0.003$) consciousness ($r = -0.27$; $p = 0.001$), and intelligence ($r = -0.23$; $p = 0.005$) of the "Big Five marker" questionnaire. In addition, the severity of depression negatively correlated with the collectivism index of the Singelis's questionnaire ($r = -0.38$; $p < 0.0001$), and the level of affiliation tendencies selectively towards close relatives (RISC, $r = -0.25$; $p = 0.002$) and also with the ability to empathy according to K. Barchard's questionnaire of emotional intelligence ($r = -0.24$; $p = 0.004$).

Comparison of psychological indicators in migrants and the indigenous population. The severity of depression according to the summary Beck's scale in migrants during their first examination was significantly higher (11.6 ± 1.2) than among the indigenous population (7.2 ± 1.2), $F(1, 97) = 6.31$; $p = 0.014$. Severity of depression among immigrants positively correlated well with the stress level ($r = 0.65$; $p < 0.0001$). Also, the level of personal anxiety according to the Spielberger's test was significantly higher among migrants (34.3 ± 1.0) in comparison with the indigenous population (25.1 ± 1.0), $F(1, 99) = 38.16$; $p < 0.0001$. An increased level among migrants was also observed for the indicator of situational anxiety. In addition, migrants showed reduced, in comparison with indigenous populations, affiliation tendencies towards close relatives (RISC test, for migrants 4.3 ± 0.1 ; for indigenous people 4.8 ± 0.1 , $F(1, 99) = 3.48$; $p = 0.055$), a reduced level of teamwork (questionnaire Singelis, migrants 4.5 ± 0.1 ; native 4.9 ± 0.1 , $F(1, 99) = 3.40$; $p = 0.05$), but an increased level of social activity (Iseng's questionnaire, 34.4 ± 0.8 among migrants; 32.1 ± 0.8 among indigenous people, $F(1, 98) = 4.43$; $p = 0.038$).

Comparison of psychological indicators in migrants during their initial and repeated examination. The level of personal anxiety in migrants upon repeated measurement six months after moving to Yakutia was significantly lower (32.2 ± 0.9) than during the first measurement immediately after the move (34.4 ± 0.9), $F(1, 46) = 4.34$; $p = 0.042$. Similar changes were observed for the indicator of situational anxiety. All indicators of personality traits, as well as indicators of the severity of depression in migrants

during the six months of their residence in Yakutia did not change significantly. However, when comparing the indicator of the severity of depression according to the Beck scale individually for each of the 47 twice surveyed migrants, it was noted that this indicator decreased in 29 people, increased in 15 people and did not change in 3 people. Thus, the severity of depression decreased and with it for most migrants, but one third of them, depression increased. We performed additional statistical analysis to find out which of the psychological factors may be associated with these differences. To do this, migrants in each of the scales of personality traits was conducted univariate ANOVA with the factor of "a group". Most of the analyzed personality indicators did not give any reliable effects on the dynamics of depression. Significant values were found for the collectivism index according to the Singelis's test and according to the affiliation tendencies towards the next of kin (RSIC test). The level of collectivism was the highest for migrants, in whom the severity of depression during their life in Yakutia decreased (4.8 ± 0.2), was slightly lower in migrants, in whom the severity of depression did not change

(4.7 ± 0.4) and was significantly reduced migrants for which the severity of depression increased (4.1 ± 0.2), $F(2, 46) = 3.35$; $p = 0.044$. Similar results were found for the RISC scale. An increase in the severity of depression is associated with a low severity of affiliation with relatives.

Discussion. General analysis of the dependence of the severity of depression on psychological personality traits in both groups, both migrants and the indigenous population in Yakutia, generally confirmed the results that were previously obtained by domestic [4, 16] and international [2, 6] researchers. Depression more pronounced as people with high neuroticism and its facets, as well as indicators of psychoticism and its facets. On the contrary, high values of extraversion, friendliness and intelligence are associated with low values of the severity of depression. However, we also revealed a significant relationship between collectivism and low severity of depression. According to G.G. Knyazeva [2, 4], such a relationship is not revealed for the Russian sample, although it is typical for respondents from Asian countries such as China [18]. It may be noted that the respondents surveyed by us are either

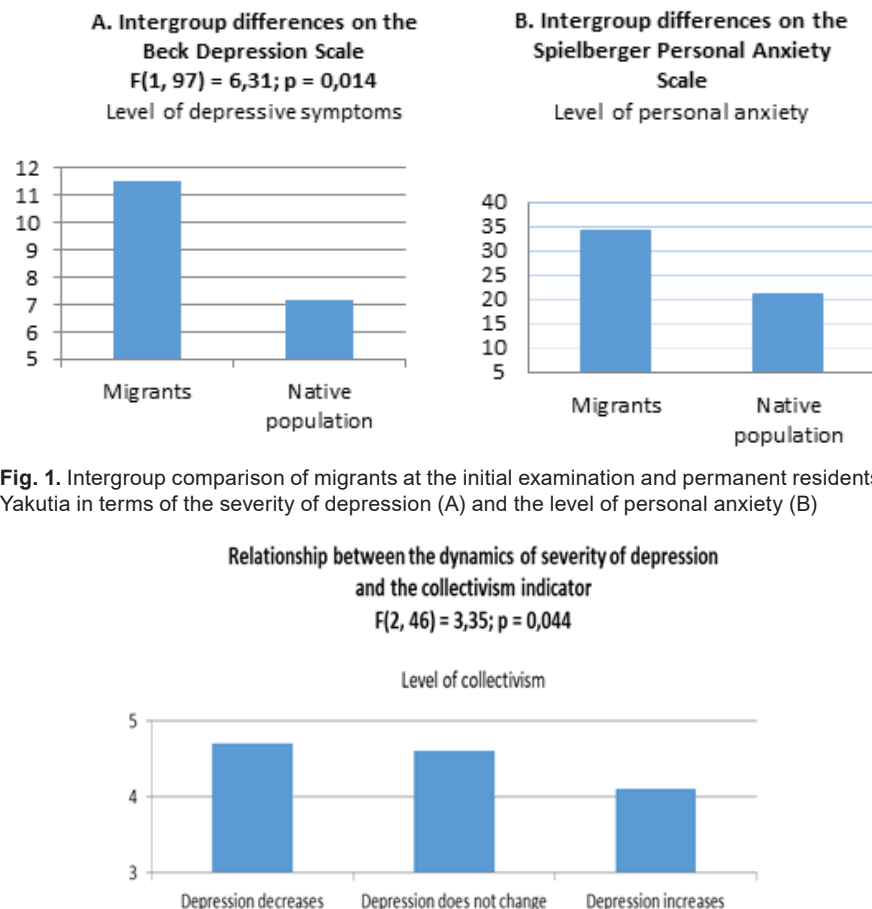


Fig. 1. Intergroup comparison of migrants at the initial examination and permanent residents of Yakutia in terms of the severity of depression (A) and the level of personal anxiety (B)

Fig. 2. Differences in the indicator of collectivism in subgroups of migrants with different dynamics of the severity of depression

indigenous population of Yakutia (Yakuts and Evenks), or are representative of Asia (Tajiks, Uzbeks, Kyrgyz) or North African (Arab) nations. Accordingly, for this indicator, we got a result typical for Asian countries, but not typical for the Russian population of Russia.

In the first month after moving to Yakutia, migrants showed increased values of the level of anxiety and the severity of depression. Six months after the move, the level of anxiety among the entire group of migrants significantly decreased, which can be considered as a result of adaptation to new conditions. The indicator of the severity of depression in migrants showed multidirectional dynamics. In a large migrants severity of depression decreased, but approximately 30%, on the contrary, has increased. Two psychological indicators of similar value - collectivism and affiliation with relatives - turned out to be significant for the formation of the dynamics of the severity of depression. Low levels of collectivism is a poor predictor of the dynamics of depression, when in the course of life in Yakutia depressive trend is growing, while a high level of teamwork and determines the decrease in severity of depression over time to adapt.

Conclusion. Thus, the collectivism indicator can be considered as one of the main markers that determine the risk of developing depression in migrants when they adapt to sub-extreme living conditions.

References

1. Депрессивная симптоматика и активность осцилляторных сетей в покое / Г.Г. Князев, А.Н. Савостьянов, А.В. Бочаров [и др.] // *Журнал высшей нервной деятельности им. И.П. Павлова*. 2015; 65: 344-349 [Knyazev G.G., Savostyanov A.N., Bocharov A.V., Saprygin A.E., Tamozhnikov S.S. Depressive symptoms and activity of oscillator networks at rest. *Journal of Higher Nervous Activity*. 2015; 65: 344-349. (In Russ.).] doi:10.7868/S0044467715030041
2. Дорошева Е.А. Валидизация русскоязычных версий двух опросников Я-концепции / Е.А. Дорошева, Г.Г. Князев, О.С. Корниенко // *Психологический журнал*. 2016; 37(3): 99-112 [Dorosheva E.A., Knyazev G.G., Kornienko O.S. Validation of Russian-language versions of two self-concept questionnaires. *Psychological journal*. 2016; 3 (37): 99-112. (In Russ.).]
3. Князев Г.Г. Валидизация русской версии маркеров факторов большой пятёрки из международного пула личностных вопросов Гольдберга / Г.Г. Князев, Л.Г. Митрофанова, А.В. Бочаров // *Психологический журнал*. – 2010; 31(5): 100-110 [Knyazev G.G., Mitrofanova L.G., Bocharov A.V. Validation of the Russian version of the Big Five factor markers from the international pool of Goldberg's personality questions. *Psychological journal*. 2010; 5 (31): 100-110. (In Russ.).]
4. Князев Г.Г. Адаптация русскоязычной версии "Опросника эмоционального интеллекта" К. Барчард / Г.Г. Князев, Л.Г. Митрофанова, О.М. Разумникова // *Психологический журнал*. 2012; 33(4): 112-121 [Knyazev G.G., Mitrofanova L.G., Razumnikova O.M. Adaptation of the Russian-language version of the Emotional Intelligence Questionnaire K. Barchard. *Psychological journal*. 2012; 4 (33): 112-121. (In Russ.).]
5. Кривошеков С.Г. Психофизиологические аспекты незавершенной адаптации / С.Г. Кривошеков, В.П. Леутин, М.Г. Чухрова. – Новосибирск, 2013. – С.100 [Krivoshchekov S.G., Leutin V.P., Chukhrova M.G. Psychophysiological aspects of incomplete adaptation. SB RAMS. 2013; 100. (In Russ.).]
6. Кузнецова И.Б. Здоровье мигрантов как социальная проблема / И.Б. Кузнецова, Л.М. Мухарямова, Г.Г. Вафина // *Организация здравоохранения*. 2019; 94(3): 367-372 [Kuznetsova I.B., Mukharyamova L.M., Vafina G.G. Migrants' health as a social problem. *Health care organization*. 2013; 3 (94): 367-372. (In Russ.).]
7. Ханин Ю.Л. Краткое руководство к шкале реактивной и личностной тревожности Ч. Д. Спилбергера / Ю.Л. Ханин. – ЛНИИФК. 1976; 18 с. [Khanin Yu.L. A brief guide to the scale of reactive and personal anxiety by C.D. Spielberger. LNIIFK. 1976; 18. (In Russ.).]
8. Beck A.T., Steer R.A., Brown G.K. Manual for the Beck Depression Inventory II. San Antonio, TX: *Psychological Corporation*. 1996
9. Buss AH, & Perry M. The Aggression Questionnaire. *Journal of Personality and Social Psychology*. 1992; 63: 452-459
10. Corr PJ Reinforcement sensitivity theory and personality. *Neuroscience and Biobehavioral Reviews*. 2004; 28 (3): 317-332
11. Cross SE, Bacon PL, & Morris ML The relational-interdependent self-construal and relationships. *Journal of Personality and Social Psychology*. 2000; 78: 791-808.
12. Cuthbert BN The role of RDoC in future classification of mental disorders. *Dialogues Clin Neurosci*. 2020; 22 (1): 81-85. doi: 10.31887 / DCNS.2020.22.1 / bcuthbert .
13. Cuthbert B.N. The RDoC framework: continuing commentary. *World Psychiatry*. 2014; 13 (2): 196-7.
14. Eysenck H. Biological dimensions of personality. *Theory and Research*, Pervin, LA, Ed., New York: Guilford. 1990; 244-276.
15. Harding TW, Arango MV, Baltazar J., Clement CE, Ibrahim HHA, Ignacio LL, Murthy RS Wig, NN Mental disorders in primary health care: a study of their frequency and diagnosis in four developing countries. *Psychological Medicine*. 1980; 10: 231-241.
16. Hofstede G. Culture's consequences (2nd ed.), Sage, Thousand Oaks, CA. 2001
17. Hofstede G., McCrae RR Personality and culture revisited: Linking traits and dimensions of culture. *Cross-Cultural Research*. 2004; 38: 52-88.
18. Holmes TH, Rahe RH The social readjustment rating scale. *Journal of Psychosomatic Research*. 1967; 11: 213-218.
19. Insel T., Cuthbert B., Garvey M., Heinszen R., Pine DS, Quinn K., Sanislow C., Wang P. Research domain criteria (RDoC): toward a new classification framework for research on mental disorders. *Am. J. Psychiatry*. 2010; 167 (7): 748-751. doi: 10.1176 / appi.ajp.2010.09091379.
20. Knyazev GG, Savostyanov AN, Bocharov AV, Merkulova EA Resting state connectivity mediates the relationship between collectivism and social cognition. *Int J Psychophysiol*. 2018; 123: 17-24. doi: 10.1016 / j.jpsycho.2017.12.002.
21. Knyazev GG, Savostyanov AN, Bocharov AV, Saprygin AE, Tamozhnikov SS Depressive symptomatology and the activity of oscillatory resting state networks. *Neuroscience and Behavioral Physiology*. 2016; 46: 942-947. doi: 10.1007 / s11055-016-0335-5
22. Knyazev GG, Savostyanov AN, Volf NV, Liou M., Bocharov AV EEG correlates of spontaneous self-referential thoughts: a cross-cultural study. *Int J Psychophysiol*. 2012; 86 (2): 173-81. doi: 10.1016 / j.jpsycho.2012.09.002.
23. Knyazev GG, Kuznetsova VB, Savostyanov AN, Dorosheva EA Does collectivism act as a protective factor for depression in Russia? *Personality and Individual Differences*. 2017; 108: 26-31. doi: 10.1016 / j.paid.2016.11.066
24. Knyazev GG, Bazovkina DV, Savostyanov AN, Naumenko VS, Kuznetsova VB, Proshina EA Suppression mediates the effect of 5-HTTLPR by stress interaction on depression. *Scand J Psychol*. 2017; 58 (5): 373-378.
25. McAdams DP Psychopathology and self: Human actors, agents, and authors. *Journal of Personality*. 2020; 8 (1): 146-155.
26. McCrae RR, Costa Jr. PC. Personality trait structure as a human Universal. *American Psychologist*. 1997; 52 (5): 509-516.
27. Singelis TM The measurement of independent and interdependent self-construal's. *Personality and Social Psychology Bulletin*. 1994; 20 (5): 580-591
28. Triandis HC Individualism – collectivism and personality. *Journal of Personality*. 2001; 907-924
29. Triandis HC, Gelfand M. Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology*. 1998; 74: 118-128.
30. Van Tol M.J., Van der Wee N., Van den Heuvel O.A., et al. Regional brain volume in depression and anxiety disorders. *Arch. Gen. Psychiatry*. 2010; 67 (10): 1002-11. doi: 10.1001 / archgenpsychiatry.2010.121.
31. Wakschlag LS, Estabrook R., Petittler A., et al. Clinical Implications of a Dimensional Approach: The Normal: Abnormal Spectrum of Early Irritability. *J Am. Acad. Child. Adolesc Psychiatry*. 2015; 54 (8): 626-34. doi: 10.1016 / j.jaac.2015.05.016.
32. Watson D., Clark LA, Harkness AR Structures of personality and the ir relevance to psychopathology. *Journal of Abnormal Psychology*. 1994; 103: 18-31
33. Yamaguchi S. Collectivism among the Japanese: A perspective from the self. U. Kim, HC Triandis (Eds.), *Individualism and collectivism: Theory, method, and applications*. 1994; 18:175-188

18. Holmes TH, Rahe RH The social readjust-