

Prevalence of generalized anxiety disorder symptoms and their associations with behavioral attitudes and perception of the future in the Russian youth

Peshkovskaya A.G.^{1,2}, Galkin S.A.^{1,2}, Larionova A.V.¹, Kornetov A.N.³

¹ National Research Tomsk State University
 36, Lenina Av., Tomsk, 634050, Russian Federation

² Mental Health Research Institute, Tomsk National Research Medical Center (NRMC) of the Russian Academy of Sciences
 4, Aleutskaya Str., Tomsk, 634014, Russian Federation

³ Siberian State Medical University
 2, Moscow Trakt, Tomsk, 634050, Russian Federation

ABSTRACT

Aim. To investigate the prevalence of generalized anxiety disorder symptoms and their associations with behavioral attitudes and perception of the future among the Russian youth.

Materials and methods. The study involved 1,300 people aged 16–25 years and was conducted online in October 2022 using online questionnaires, which included the GAD-7 screening questionnaire on the severity of anxiety symptoms.

Results. According to the questionnaire, 25.5% of young people who participated in the study reported medium to high intensity of anxiety symptoms. These respondents were significantly more likely to perceive the image of the country's future negatively ($p = 0.002$). In addition, the largest proportion of people who reported a desire to leave the country (38.6%) was registered among young people who were at risk of generalized anxiety disorder. The authors emphasize that the study results should be interpreted in relation to the time period of data collection.

Conclusion. The study showed that generalized anxiety disorder symptoms negatively affected the subjective image of the future among young people and highlighted the need for primary psychological prevention in this age group.

Keywords: anxiety, youth, perceived future, screening, generalized anxiety disorder

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Conformity with the principles of ethics. All respondents signed an informed consent to participation in the study and publication of the anonymized and generalized data. The study was approved by the Ethics Committee at Tomsk State University (Protocol No. 291 of 19.09.2022).

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Распространенность симптомов генерализованного тревожного расстройства и их связь с поведенческими установками и восприятием будущего страны у российской молодежи

Пешковская А.Г.^{1,2}, Галкин С.А.^{1,2}, Ларионова А.В.¹, Корнетов А.Н.³

¹ Национальный исследовательский Томский государственный университет (НИ ТГУ)
Россия, 634050, Томск, пр. Ленина, 36

² Научно-исследовательский институт (НИИ) психического здоровья, Томский национальный исследовательский медицинский центр (НИМЦ) Российской академии наук
Россия, 634014, Томск, ул. Алеутская, 4

³ Сибирский государственный медицинский университет (СибГМУ)
Россия, 634050, Томск, Московский тракт, 2

РЕЗЮМЕ

Цель: изучить распространенность симптомов генерализованного тревожного расстройства среди российской молодежи в современных реалиях и определить их связь с поведенческими установками и восприятием будущего.

Материалы и методы. Исследование, участие в котором приняли 1 300 человек в возрасте 16–25 лет, проводилось в октябре 2022 г. в онлайн-формате посредством заполнения электронных форм анкеты и скрининг-опросника уровня выраженности симптомов тревоги ГТР-7 (GAD-7).

Результаты. Согласно скрининг-опроснику, симптомы генерализованного тревожного расстройства были выявлены у 25,5% участников исследования. Молодые лица с риском генерализованного тревожного расстройства статистически значимо чаще воспринимали образ будущего страны резко негативно ($p = 0,002$). Кроме того, наибольшее число сообщивших о желании покинуть страну (38,6%) было зафиксировано среди молодых людей с риском генерализованного тревожного расстройства. Авторы подчеркивают, что результаты следует интерпретировать с привязкой к временному периоду сбора данных.

Заключение. Симптомы генерализованного тревожного расстройства ассоциированы с негативной оценкой будущего среди молодежи, что свидетельствует о необходимости первичной психологической профилактики в этой возрастной группе.

Ключевые слова: тревога, молодежь, восприятие будущего, скрининг, генерализованное тревожное расстройство

Конфликт интересов. Авторы декларируют отсутствие явных и потенциальных конфликтов интересов, связанных с публикацией настоящей статьи.

Источник финансирования. Результаты получены в рамках выполнения государственного задания Минобрнауки России, проект №FSWM-2022-0006.

Соответствие принципам этики. Все респонденты дали информированное согласие на участие в исследовании и публикацию данных в анонимном и обобщенном виде. Исследование одобрено этическим комитетом НИ ТГУ (протокол № 291 от 19.09.2022).

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INTRODUCTION

The health and psychological well-being of Russian young people, who are largely subjects of social change, are of key importance in the modern realities of the country's development. The COVID-19 pandemic,

whose consequences for the mental health of the young working-age population will be observed for a long time [1, 2], the increase in international tension, which has an additional impact on the emotional state, social and psychological adaptation, and uncertainty about the future significantly increase the risk of developing

mental disorders, especially anxiety disorders [3]. Symptoms of anxiety and phobic disorders are among the most common mental health impairments in young people and are recorded more often in them than in the older population [4, 5]. Numerous studies have shown that symptoms of generalized anxiety disorder affect cognition by triggering emotion-driven decision-making, and also enhance avoidance behavior [6–10]. In particular, clinical samples show similar observations, for example, a study by E.M. Mueller et al., which included patients with generalized anxiety disorder [11]. The results of psychological studies on anxiety as a future-oriented mood state [12], which includes concern about what might happen and the expectation of a future threat [13, 14], emphasize the impact of anxiety on a negative evaluation of one's own future and a negative perception of the future in general [15].

Considering the above, the aim of the study was to investigate the prevalence of generalized anxiety disorder symptoms in Russian youth and to understand the association of anxiety symptoms with young people's behavioral attitudes and perception of the future.

MATERIALS AND METHODS

The study was conducted in compliance with the principles of the Declaration of Helsinki, approved by the Ethics Committee at Tomsk State University and was completely anonymous. Data collection was performed in the format of an online survey in October 2022 by sharing a link to an online form with questions for the respondent. The survey included three question blocks: (1) demographic (sex, age, academic major, educational institution); (2) the GAD-7 assessment questionnaire to diagnose anxiety symptoms and the risk of generalized anxiety disorder [16, 17]; (3) questions on perceived future, including perception of expected changes in the country over the next five years evaluated with the five-point Likert scale, and behavioral attitudes (motive and readiness to emigrate).

All respondents signed an informed consent to participate in the study and publish the data in an anonymous and generalized form. The study was carried out in compliance with all Russian and international regulations on scientific research involving human participants and in accordance with the Federal Law No. 152-FZ of 27.07.2006 "On Personal Data".

In total, the study involved 1,300 people aged 16 to

25 (18 [17; 19]) years, including 700 women (53.8% of the sample) and 600 men (46.2%). All the participants were students of higher educational institutions and vocational training colleges of Tomsk and the Tomsk region with majors in natural sciences (319 people, 24.5% of the total), social sciences (350, 27%), and engineering sciences (630, 48.5%).

The data were processed using the Statistica 12.0 software package for Windows (StatSoft). The data were presented as the median and the interquartile range $Me [Q_1; Q_3]$ as well as in absolute and relative units (%). Normality of data distribution was verified using the Shapiro – Wilk test. The data obtained did not fit the normal distribution. The Pearson's test (χ^2 test) and the Mann – Whitney U test were used to identify the significance of the differences in parameters between the groups. Correlations between the studied parameters were assessed using the Spearman's rank correlation coefficient (r_s). The differences were considered statistically significant at $p < 0.05$.

RESULTS

To investigate the prevalence and severity of anxiety and GAD symptoms in the young people, we analyzed data from the GAD-7 questionnaire of 1,300 participants. Based on the results, we divided all the respondents into two groups in accordance with the existing guidelines: group 1 with a minimal (0–4 points) or moderate (5–9 points) level of anxiety symptoms, $n = 969$ (74.5%), and group 2 with a medium (10–14 points) or high (15–21 points) level of anxiety symptoms, $n = 331$ (25.5%), which was considered as the risk of generalized anxiety disorder (Fig. 1). The resulting groups were comparable in terms of gender ($p = 0.116$) and age ($p = 0.418$).

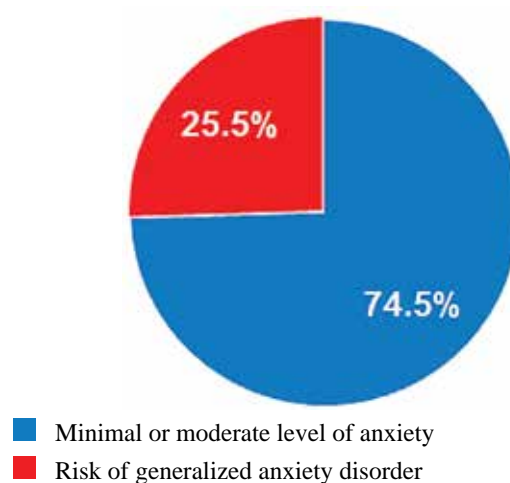


Fig. 1. Results of the assessment of generalized anxiety disorder symptoms (GAD-7) in Russian youth

Next, we analyzed the respondents' answers to questions clarifying the perception of Russia's future and migration behavior, particularly the motive and readiness to emigrate, taking into account the severity of reported anxiety symptoms. We found that the share of the respondents with a negative perception of the country's future was relatively low and ranged from 6.1 to 10.6% in groups of respondents with different levels of anxiety symptoms. However, the Pearson's test revealed significant differences in perception of the future between the groups ($p = 0.002$). Moreover, negative perception of the future showed a significant positive correlation with the severity of reported anxiety symptoms ($r_s = 0.372$; $p < 0.001$). Thus, young people who were at risk of generalized anxiety

disorder based on the results of the GAD-7 assessment were significantly more likely to perceive the image of the country's future negatively (Fig. 2).

A similar analysis was carried out with respect to data on the intention of young people to emigrate if there is such an opportunity. The largest share of respondents who reported a motive to leave the country (38.6%) was among young people with medium to high level of anxiety symptoms who comprise the group at risk of generalized anxiety disorder (Fig. 3). Young people at risk of generalized anxiety disorder were significantly more likely to report a motive to leave the country ($p < 0.001$). The motive to emigrate also showed a positive correlation with the severity of anxiety symptoms in the surveyed sample ($r_s = 0.418$; $p < 0.001$).

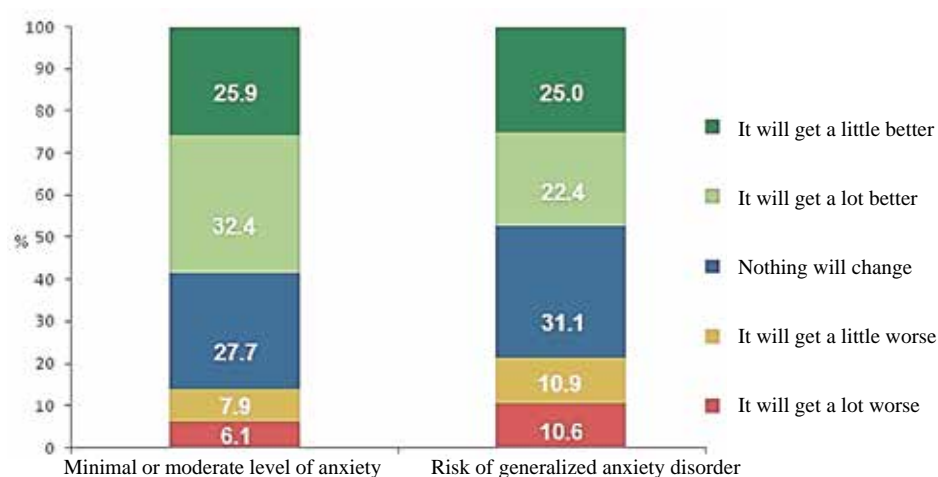


Fig. 2. Generalized anxiety disorder symptoms and perceived future of the country among Russian youth

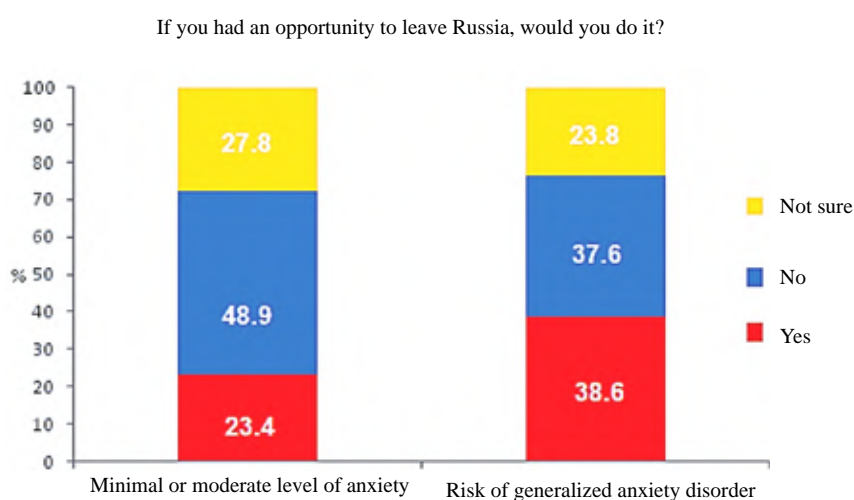


Fig. 3. Generalized anxiety disorder symptoms and migration intentions among Russian youth

DISCUSSION

The study results showed that a quarter (25.5%) of the surveyed young people had a high risk of generalized anxiety disorder. This parameter exceeds the average statistical data [6, 18, 19], which indicates the influence of current media and socio-political environment on the psychological well-being of young people. At the same time, the presence of generalized anxiety disorder symptoms among a relatively large number of young people requires attention from the psychological services of higher education institutions and vocational training colleges and psychological support services for the general population, since the identified anxiety parameters indicate vulnerability of this share of young people and a high risk of psychological distress, reduced level of social adaptation, and other mental health disorders. It is worth mentioning that, according to the majority of clinicians, unaddressed anxiety disorder in adolescents and young adults often progressed into depression in the future [18, 19].

We also found that in some young people the risk of generalized anxiety disorder was associated with a trend to perceive the future negatively. The data obtained were consistent with the results of previous studies [20, 21]. For example, in their study, I.A. Ralnikova [20] found that the level of anxiety affects perceived structure of the future: the more severe the level of anxiety, the lower the indicators of the future structure and the higher its uncertainty. Moreover, comparing our results with previous data obtained by the Levada Center in 2018 [22], 2019 [23], and 2020 [24], we observe a slight decrease in the positive expectations in youth and an increase in the share of those who reported a motive to emigrate. However, we emphasize that our results should be interpreted with reference to the time period of data collection.

Generally, anxiety symptoms including great severity associated with the risk of generalized anxiety disorder in youth are a significant socioeconomic and medical problem. Generalized anxiety disorder often leads to a disruption in social and professional activity and does not allow to maintain a fully-fledged lifestyle, which is especially important for working-age young people. Nevertheless, despite the importance of this disorder for public health, the vast majority of anxiety disorders remain undiagnosed, even in economically developed countries [25]. The prevention of anxiety disorders by other psychological tools obtained with the help of a psychologist and a psychotherapist is

of particular importance. Taking into consideration the age group in which anxiety symptoms prevail, we should mention the work of an educational psychologist, which consists in creating a favorable psychological climate, supporting students' personal and professional growth, ensuring psychological security in students, teachers and employees, and supporting and strengthening their mental health and well-being.

CONCLUSION

The study showed that severity of anxiety symptoms associated with the risk of generalized anxiety disorder affects the subjective perception of the future in Russian youth. The obtained results can be used to provide psychological counseling to young people who are prone to experiencing anxiety in constructing a holistic view of the future, designing life prospects during crisis, as well as assistance in experiencing crisis periods.

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Authors' contribution

Peshkovskaya A.G. – conception and design. Peshkovskaya A.G., Larionova A.V. – methodology. Larionova A.V. – carrying out of the research. Galkin S.A. – analysis of the data. Galkin S.A., Peshkovskaya A.G. – drafting of the manuscript; Peshkovskaya A.G., Kornetov A.N. – editing of the manuscript. Larionova A.V., Peshkovskaya A.G. – research management.

Authors' information

Peshkovskaya Anastasia G. – Director of the Neuroscience Center, NR TSU; Junior Researcher, Mental Health Research Institute, Tomsk NRCM, Tomsk, peshkovskaya@data.tsu.ru, <https://orcid.org/0000-0002-3951-395X>

Galkin Stanislav A. – Cand. Sci. (Med.), Junior Researcher, the Neuroscience Center, NR TSU; Junior Researcher, Mental Health Research Institute, Tomsk NRCM, Tomsk, s01091994@yandex.ru, <https://orcid.org/0000-0002-7709-3917>

Larionova Anastasia V. – Cand. Sci. (Psychology), Researcher, the Neuroscience Center, NR TSU, Tomsk, anpavlar@mail.ru, <https://orcid.org/0000-0002-8523-2913>

Kornetov Alexander N. – Dr. Sci. (Med.), Professor, Head of the Fundamental Psychology and Behavioral Medicine Division, Siberian State Medical University, Tomsk, alkornetov@gmail.com, <https://orcid.org/0000-0002-2342-7504>

(✉) **Galkin Stanislav A.**, s01091994@yandex.ru

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