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Characteristics of Students' Burnout and Perfectionism in China and Russia

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Abstract: The problems of studying the relationship between manifestations of perfectionism and emotional burnout are of considerable interest to modern psychology. Prospective participants in such a study are representatives of various professional communities and students as future specialists. The purpose of this work is to consider the manifestations and relationships of emotional burnout, self-esteem, mental states and perfectionism among Russian and Chinese students. A total of 80 people took part in the study (40 Russian and 40 Chinese students). Research Methods applied: 1) multidimensional scale of perfectionism by P. Hewitt and G. Flett, adapted by I.I. Grachev; 2) the burnout questionnaire by K. Maslach adapted by N.E. Vodopyanov; 3) a technique for diagnosing self-assessment of mental states by G. Eysenck. As a result of the use of comparative and correlation types of analysis, intercultural differences and interrelations between the characteristics of perfectionism, self-assessment of the emotional state and characteristics of emotional burnout were found. Respondents from China showed lower results on the "aggressiveness" scale compared to Russian respondents. Russian students showed higher scores on the "anxiety" scale than Chinese students. Meanwhile, Chinese students, compared to Russian respondents, showed higher results in self-confidence and their future. In the course of the study, both groups showed average indicators of rigidity, but the level of rigidity in Russian students was higher than in Chinese students. In conclusion of this scientific study, the main recommendations for the correction of emotional burnout and self-regulation of perfectionism and mental states among students are proposed.

Keywords: emotional burnout, perfectionism, mental states, Russian and Chinese students.

Introduction

In the conditions of emotional tension, which the majority of students and teachers of modern universities find themselves in, it is especially important to work on maintaining their psychological health. Over the past few years, the foreign psychological science has been demonstrating an increased interest in the negative side of perfectionism phenomenon, which is now regarded as one of the main symptoms of the emotional burnout development along with other stable human concepts (Fang and Liu, 2022; Filipkowski et al., 2021; Flett et al., 2016; Martin et al., 2022; Stošić and Fadiya, 2017; Stošić, Dermendzhieva and Tomczyk, 2020; Tomczyk et al., 2022). Perfectionism is a complex phenomenon; its influence can cover all the spheres of human life. Western researchers such as Hewitt, P. and Flett, G. (1991a, 1999, 1991b), Ingrem, S. (1990), and others note, with an incorrect ratio of perfectionist tendencies and their disproportionate development, there is a risk of neurotic perfectionism formation. With the so-called 'normal' perfectionism, a person gets satisfaction from hard work, strives for self-development and results' improvement, while remaining able to accept the fact that there is a limit to their personal or situational perfection (Frost et al., 1993). With neurotic perfectionism, nothing seems perfect enough to an individual. A deep-rooted sense of inferiority and vulnerability plunges him or her into a circle of self-destructive super-efforts, and every case or task turns into another threatening challenge (Antony et al., 1998; Shumaker and Rodebaugh, 2009).

Several studies identify the consequences of the neurotic perfectionism formation, such as depression, anxiety, low self-esteem, alcoholism, drug addictions, etc. (Hewitt and Flett, 1999; Ingrem 1990; Frost et al., 2005; Debrowski 1997; Habke, Hewitt and Flett, 1999). In modern psychology, depending

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on the point of view held by different scientists, perfectionism implies high standards that an individual sets for him/herself; a person's desire for perfection as a whole, and for its individual manifestations, expressed in the improvement of activities and their products, bringing it up to certain intellectual, moral and aesthetic standards (Yasnaya and Enikolopov, 2007; Permyakova and Sheveleva, 2015).

On the one hand, perfectionism as a stable personality quality can be the basis for the development of emotional burnout (Stumpf and Parker, 2000; Rice and Liu, 2020). On the other hand, in the process of developing the syndrome of emotional burnout and alienation from activity, an adult person faces a feeling of inability to meet established personal standards (Orel, 2014; Mikhailova, 2017). It is important to note that perfectionism affects the burnout development not from the point of view of the individual's desire to achieve an ideal, but in connection with his/her constant attempt to assess how much they correspond to this ideal. If a professional feels a low degree of compliance with established standards, he/she is faced with the experience of distress (Terry-short et al., 1995; Stoeber, Harris and Moon, 2007; Spagnoli et al., 2021; Levine and Milyavskaya, 2018).

In medical psychology, perfectionism and hostility are considered as personal factors of depressive and anxiety disorders (Abdollahi, Hosseinian and Asmundson, 2018; Dunkley et al., 2020; Suh et al., 2022; Fernández-García et al., 2022). According to the results of studies conducted under the guidance of N.G. Garanyan, students with an increased level of perfectionism demonstrate high rates of depression, anxiety (both general and social), as well as emotional maladaptation (Garanyan, Andrusenko and Hlomov, 2009). The study of perfectionism in the context of anxiety and depressive disorders was conducted by V.V. Paramonova (Panina, 2020).

Recently, the Russian scientific world has been demonstrating a growing interest in the study of the correlation between perfectionism and emotional burnout syndrome among representatives of various professions. A special place among these works is occupied by studies of perfectionism and emotional burnout manifestations among representatives of the educational environment, in particular, among teachers of secondary and higher schools (Melnichuk, 2017; Suddarth and Slaney, 2001; Hewitt, Flett and Mikail, 2017).

Thus, according to O.I. Kayasheva's research, if a teacher does not carry out the necessary reflection, experiences chronic fatigue and has personal ideals set before him/her, which he/ she strives to achieve in any situation presented by the working environment, perfectionism becomes one of the leading factors in the development of emotional burnout syndrome (Kayasheva, 2018). In her research, the author notes the following features of the correlation between the perfectionism manifestations and emotional burnout among university teachers. With a high level of self-centred perfectionism, teachers experience symptoms of such a burnout phase as 'anxiety tension', represented by the experience of a traumatic situation, as well as symptoms of the 'resistance' phase, expressed in the reduction of professional responsibilities, and symptoms of the 'exhaustion' phase, manifested in depersonalization, i.e., in the teacher's personal detachment. With a high level of perfectionism focused on others, teachers experience such symptoms of the 'resistance' phase as limitation in the emotional response sphere, its inadequacy and selectivity. A high level of socially prescribed perfectionism, in turn, provokes the development of 'exhaustion' phase symptoms in teachers, expressed in emotional deficit and detachment (Kayasheva, 2018; Mikhailova and Farennikova, 2022; O'Connor, Rasmussen and Hawton, 2010).

A.S. Melnichuk's research also confirmed the statement that perfectionism plays a significant role in the emotional burnout development among teachers of higher educational institutions. So, according to the results of his research, there is correlation between the structural components of the burnout syndrome with perfectionism in general and its components in teachers. At the same time, he notes correlation between all the perfectionism components and depersonalization, as well as the connection of socially prescribed perfectionism with the self-assessment of professional effectiveness (Melnichuk, 2017).

If we consider the perfectionism phenomenon as a determining factor in the emotional burnout development, then we can assume that the correlation of these psychological states manifests itself as early as during the period of study at the university, at the time when the professional formation of the student's personality takes place. In the last few years, this problem has been seen particularly relevant in Russian scientific works (Koivula, Hassm and Fallby, 2002; Molnar et al., 2006).

In general, considering the Russian researchers' works on this problem, we can conclude that perfectionism is a fairly stable personality trait of modern Russian students, which manifests itself mainly at the average level (Garanyan, Andrusenko and Hlomov, 2009; Panina, 2020).

From the point of view of emotional burnout prevention and perfectionism correction, it is important to study not only Russian, but also foreign students. Therefore, the purpose of our study was to identify the specifics of perfectionism and emotional burnout manifestations in Russian and Chinese students.

Materials and Methods

The sample of respondents was represented by 80 Russian and Chinese students aged 19 to 25 years: 40 Russian and 40 Chinese students of 2-4 Bachelor's and 1-2 Master's courses studying at the Philology Department at the Peoples' Friendship University of Russia.

In the course of conducting the empirical study, the authors used the following methods: 1) the multidimensional perfectionism scale by P. Hewitt and G. Flett adapted by I.I. Gracheva (Gracheva, 2008); 2) the burnout questionnaire by K. Maslach adapted by N.E. Vodopyanova (Vodopyanova and Starchenkova, 2008); 3) the methodology for diagnosing the self-assessment of mental states by G. Aizenk (Rajgorodskij, 2011). Statistical verification of differences and correlation between perfectionism and emotional burnout indicators, as well as the students' mental states was carried out by calculating the Mann-Whitney U-criterion and correlation analysis using Spearman's rank correlation coefficient.

All the methods used in the course of the study to diagnose the manifestations of perfectionism, emotional burnout and mental states of Chinese students were translated into Chinese using the semantic translation method. We also adjusted K. Maslach's burnout questionnaire. Since this technique is aimed at identifying the emotional burnout indicators in representatives of various professions and is not suitable for studying these indicators in students, we have transformed statements related to professional activity into statements related to educational activity. The need for such transformations was also caused by the fact that there are no burnout questionnaires adapted for students in the scientific literature.

Results and Discussion

Diagnostics of emotional burnout manifestations in Russian and Chinese students using the burnout questionnaire by K. Maslach adapted by N.E. Vodopyanova did not reveal significant differences in the emotional burnout characteristics (Table 1).

Table 1

Results of differences in emotional burnout among Russian and Chinese students (n = 80)

Methodics scale	Average value (Russian students)	Average value (Chinese students)	Mann-Whitney U-criterion	p-level
Emotional exhaustion	24.525	22.85	729.5	0.497
Depersonalization	10.475	11.05	768	0.757
Reduction of academic progress	28.675	26.9	669.5	0.208

Note: * - significance level $p < .05$; ** - significance level $p < .01$

Characterizing the level of emotional burnout in Russian and Chinese students in general, we can note that its indicators are close to high, but there are no significant differences in the indicators of all burnout components between Russian and Chinese students.

The results of the differences in the indicators of the Multidimensional Perfectionism Scale by P. Hewitt and G. Flett adapted by I.I. Gracheva are presented in Table 2.

Table 2

Results of establishing the significance of differences in the level of perfectionism indicators in Russian and Chinese students (n = 80)

Methodics scale	Average value (Russian students)	Average value (Chinese students)	Mann-Whitney U-criterion	p-level
Self-centered perfectionism	64.7	69.625	574.5	0.030*
Perfectionism focused on others	50.125	61.75	363	0.000**
Socially prescribed perfectionism	52.3	59.175	534	0.010**
Integral scale	167.125	190.55	312	0.000**

Note: * - significance level $p < .05$; ** - significance level $p < .01$

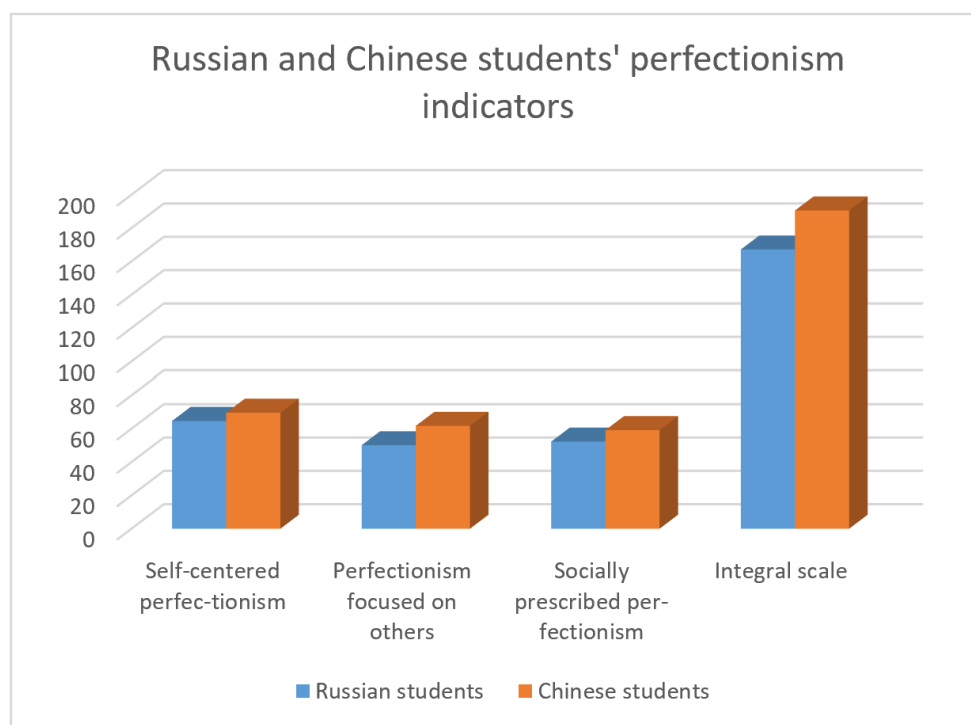


Figure 1. Comparison of perfectionism indicators in Russian and Chinese students (n = 80).

When analysing the results of the empirical study, it was revealed that the level of perfectionism in Chinese students in general and for each of its components is significantly higher than that of Russian students. The results obtained may indicate the specific features of Chinese culture representatives in relation to perfectionism phenomenon.

Unlike Chinese students, Russian students tend to be less demanding about themselves and their achievements, as well as about others. The lowest indicators on the scale of perfectionism focused on others were demonstrated by Russian students. Russian students are less inclined to expect the ideal performance of activities from others, including meaningful, close people.

Analysing the lower indicators of Chinese students on the scale of socially prescribed perfectionism, we can assume that in the conditions of studying in Russia, Chinese students experience less psychological pressure from parents and society. This is expressed in their reduced desire to meet the high requirements of Chinese society.

The results of the applied methodology for diagnosing the self-assessment of mental states by G. Aizenk are presented in Table 3 and Figure 2. Within the conducted comparative analysis using the

Mann-Whitney U-test, significant differences in indicators of anxiety, aggression and rigidity were found in Russian and Chinese students. Chinese students scored the lowest on the "aggression" scale compared to Russian students, which characterizes them as more restrained and patient. Russian students showed higher scores on the "anxiety" scale compared to Chinese students. Chinese students show a great degree of confidence in themselves and in their future. The study revealed some average indicators of rigidity in the both groups of respondents. Nevertheless, the level of rigidity in Russian students is higher than in Chinese (Table 3).

Table 3

Results of establishing the significance of differences in the level of indicators of psycho-emotional states in Russian and Chinese students (n = 80)

Methodics scale	Average value (Russian students)	Average value (Chinese students)	Mann-Whitney U-criterion	p-level
Anxiety	24.525	22.85	588.5	0.041*
Frustration	10.475	11.05	773.5	0.798
Aggression	28.675	26.9	527	0.008**
Rigidity	24.525	22.85	545	0.014*

Note: * - significance level $p < .05$; ** - significance level $p < .01$

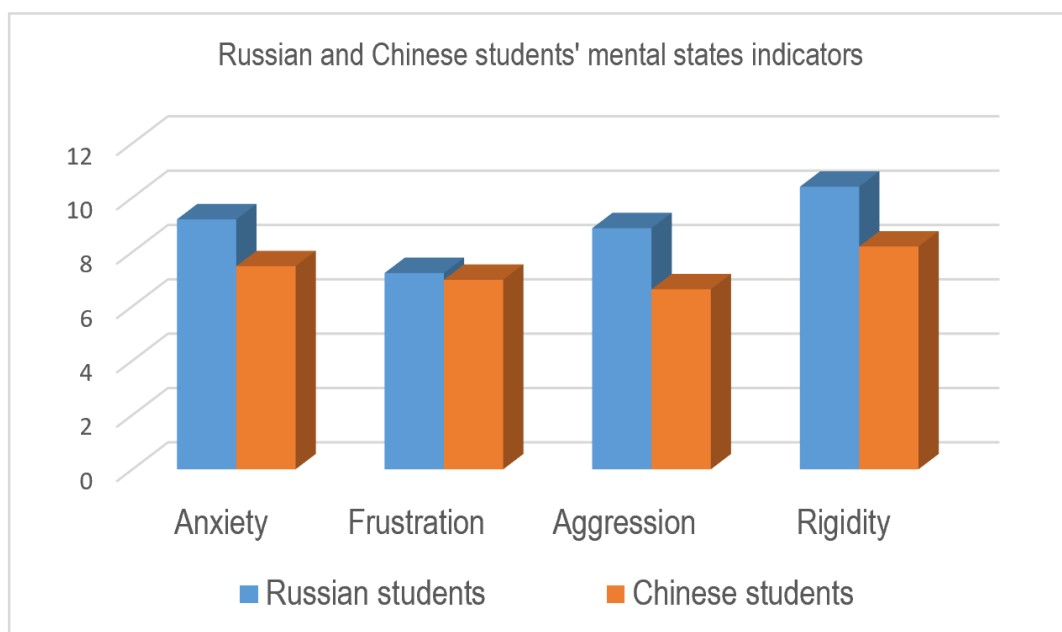


Figure 2. Comparison of psycho-emotional states indicators in Russian and Chinese students (n = 80).

The both groups of students demonstrated average performance on the rigidity scale. Nevertheless, the level of rigidity in Russian students is significantly higher than in Chinese. This suggests that Russian students are more difficult or unable to change their behavior, attitudes and activities when it is necessary. Russian students tend to experience discomfort when their usual routine is violated and deviations from their previous plans are combined with difficulties caused by the need to adapt to these changes. These results can tell us that Russian students take it hard to leave the comfort zone represented by the usual everyday situations in which they are accustomed to carry out their daily activities (Figure 2).

In the course of the correlation analysis, significant feedback was revealed between the indicators of the integral perfectionism scale and such a component of emotional burnout as depersonalization in

Chinese students. Probably, the indicators of Chinese students' perfectionism do not manifest themselves in the symptoms of emotional burnout (Table 4).

Table 4

The results of the correlation analysis of perfectionism and emotional burnout features in Chinese students (n = 40)

Methodics scale	Emotional exhaustion	Depersonalization	Reduction of academic progress	Anxiety	Frustration	Aggression	Rigidity
Integral Scale	-.281	-.331*	.102	.134	0.017	.050	.044
Emotional exhaustion	1.000	-	-	.491**	.516**	.428**	.581**
Depersonalization	-	1.000	-	.266	.410**	.462**	.437**
Reduction of academic progress	-	-	1.000	-.253	-.251	-.184	-.248

Note: * - significance level $p < .05$; ** - significance level $p < .01$

Characterizing the absence of significant links between perfectionism components and emotional burnout components in Russian students, provided that their perfectionism indicators are close to low and burnout indicators are high, we can assume the presence of other objective factors that have increased their burnout.

Probably, the leading factors in the development of emotional burnout in both groups of students were stress factors related to educational activities. It was revealed that the higher the level of emotional exhaustion among Russian and Chinese students, the higher the indicators of their frustration and anxiety and vice versa. Chinese students have less pronounced emotional exhaustion in these indicators. The reduced level of frustration among Russian students may indicate a reduced level of importance of educational activities for them due to the presence of urgent needs in other spheres of life.

The results of the study revealed the connection between emotional exhaustion in Chinese students with such mental states as aggression and rigidity. Despite the fact that Chinese students tend to show emotional detachment towards people around them, they express this in aggression to a lesser extent, compared to Russian students. In addition, the correlation analysis revealed the connection of such a component of burnout as the reduction of academic progress with indicators of frustration and rigidity among Russian students.

Conclusions

Summarizing the results of our research, we can note that the indicators of perfectionism in Chinese students are close to high, while the indicators of perfectionism in Russian students are close to low.

The results obtained may indicate the specific features of representatives of Chinese culture in the context of the phenomenon of perfectionism. Unlike Chinese students, Russian students tend to be less demanding about themselves and their achievements, as well as about other people.

Characterizing the emotional burnout in Russian and Chinese students, we noted the absence of significant differences in its indicators in these groups. Thus, both groups of respondents demonstrated close to high rates of emotional burnout. It was also revealed that the indicators of anxiety, aggression and rigidity in Russian students are significantly higher than those in Chinese students. In this regard, we can note the need for preventive work in order to reduce the level of burnout, anxiety, aggression and rigidity in students.

Based on the results of the study, we will formulate the following recommendations for working with students:

1. Minimizing the level of students' emotional burnout. To implement this task, we can recommend psychologists to conduct regular trainings, the purpose of which is to develop the students' self-regulation skills. It is necessary to develop the students' skill of building a balance between academic activities and other areas of life (communication, hobbies, etc.), which will not only reduce the level of burnout, but also prevent its development in general.

2. Reducing the level of anxiety, frustration, aggression and rigidity of students, since high rates of these mental states provoke the development of emotional burnout components.

3. The development of the students' learning motivation, which ensures not only the desire for the learning process, but also the meaningful performance of tasks.

4. Development and implementation of a mentoring system for foreign students in each individual study group.

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Conflict of interests

The authors declare no conflict of interest.

Author Contributions

All authors contributed to the research design, data collection, data analysis, and write up. All authors contributed to the article and approved the submitted version.

References

- Abdollahi, A., Hosseinian, S., & Asmundson, G. J. (2018). Coping styles mediate perfectionism associations with depression among undergraduate students. *The Journal of General Psychology*, 145(1), 93–105. <https://doi.org/10.1080/00221309.2017.1421137>
- Antony, M. M., Purdon, C. L., Huta, V., & Swinson, R. P. (1998). Dimensions of perfectionism across the anxiety disorders. *Behaviour research and therapy*, 36(12), 1143-1154. [https://doi.org/10.1016/s0005-7967\(98\)00083-7](https://doi.org/10.1016/s0005-7967(98)00083-7)
- Debrovski, K. (1997). Perfectionism: yearning to become what one ought to be. London: *Little, Brown & Co*, 1997, pp. 28-34.
- Dunkley, D. M., Starks, C. J., Gouveia, L., & Moroz, M. (2020). Self-critical perfectionism and lower daily perceived control predict depressive and anxious symptoms over four years. *Journal of Counseling Psychology*, 67(6), 736–746. <https://doi.org/10.1037/cou0000425>
- Fang, T., & Liu, F. (2022). A Review on Perfectionism. *Open Journal of Social Sciences*, 10(1), 355-364. <https://doi.org/10.4236/jss.2022.101027>
- Fernández-García, O., Gil-Llario, M. D., Castro-Calvo, J., Morell-Mengual, V., Ballester-Arnal, R., & Estruch-García, V. (2022). Academic Perfectionism, Psychological Well-Being, and Suicidal Ideation in College Students. *International journal of environmental research and public health*, 20(1), 85. <https://doi.org/10.3390/ijerph20010085>
- Filipkowski, K.B., Nordstrom, A.H., Pham, T., Floren, M., & Massey, S.L. (2021). The Impact of Perfectionism on Mental, Social, and Physical Health of Graduate Students in the Health Sciences. *The Internet Journal of Allied Health Sciences and Practice*, 19(3), 19. <https://doi.org/10.46743/1540-580X/2021.1983>
- Flett, G. L., Nepon, T., Hewitt, P. L., & Fitzgerald, K. (2016). Perfectionism, components of stress reactivity, and depressive symptoms. *Journal of Psychopathology and Behavioral Assessment*, 38(4), 645–654. <https://doi.org/10.1007/s10862-016-9554-x>
- Frost, R.O., Heimberg, R.G., Holt, C.S., Mattia, J.I., & Neubauer, A.L. (1993). A comparison of two measures of perfectionism. *Personality and Individual Differences*, 14(1), 119-126. [https://doi.org/10.1016/0191-8869\(93\)90181-2](https://doi.org/10.1016/0191-8869(93)90181-2)
- Frost, R.O., Marten, P.A., Lahart, C., & Rosenblate, R. (2005). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14, 449-468. <https://doi.org/10.1007/BF01172967>
- Garanyan, N.G., Andrusenko, D.A., & Hlomov, I.D. (2009). Perfekcionizm kak faktor dezadaptacii studentov [Perfectionism as a factor of student disadaptation]. *Psychological Science and Education*, 14(1), 72–81. Retrieved from <https://www.elibrary.ru/item.asp?id=12242648>
- Gracheva, I.I. (2008). Adaptaciya metodiki 'Mnogomernaya shkala perfekcionizma' P. H'yuita i G. Fletta [Adaptation of the method 'Multidimensional scale of perfectionism' by P. Hewitt and G. Flett]. *Psychological Journal*, 27(6), 73-81.
- Habke, A. M., Hewitt, P. L., & Flett, G. L. (1999). Perfectionism and sexual satisfaction in intimate relationships. *Journal of Psychopathology and Behavioral Assessment*, 21, 307-322. <https://doi.org/10.1023/A:1022168715349>
- Hewitt, P. L., & Flett, G. L. (1991a). Dimensions of perfectionism in unipolar depression. *Journal of Abnormal Psychology*, 100(1), 98–101. <https://doi.org/10.1037/0021-843X.100.1.98>
- Hewitt, P. L., & Flett, G. L. (1991b). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60(3), 456–470. [\[www.ijcrsee.com\]\(http://www.ijcrsee.com\)](https://doi.org/10.1037/0022-</p></div><div data-bbox=)

- [3514.60.3.456](#)
- Hewitt, P. L., Flett, G. L., & Mikail, S. F. (2017). *Perfectionism: A relational approach to conceptualization, assessment, and treatment*. Guilford Publications.
- Hewitt, P., & Flett, G. (1999). MPS-The multidimensional scale of perfectionism. *Journal of Counseling and Development*, 9, 44.
- Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60(3), 456-470. <https://doi.org/10.1037/0022-3514.60.3.456>
- Ingram, S. (1990). Perfectionism standarts bonded with deviations. *Journal of Psychopathology*, (1), 16-28.
- Kayasheva, O.I. (2018). Perfekcionizm kak faktor razvitiya sindroma emocional'nogo vygoraniya prepodavatelej vysshej shkoly [Perfectionism as a factor of development of the syndrome of emotional burnout of teachers of a higher school]. Vector of science of Togliatti State University. Series: *Pedagogy, psychology*, 4(35), 64-70. <https://doi.org/10.18323/2221-5662-2018-4-64-70>
- Koivula, N., Hassmén, P., & Fallby, J. (2002). Self-esteem and perfectionism in elite athletes: Effects on competitive anxiety and self-confidence. *Personality and individual differences*, 32(5), 865-875. [https://doi.org/10.1016/S0191-8869\(01\)00092-7](https://doi.org/10.1016/S0191-8869(01)00092-7)
- Levine, S. L., & Milyavskaya, M. (2018). Domain-specific perfectionism: An examination of perfectionism beyond the trait-level and its link to well-being. *Journal of Research in Personality*, 74, 56-65. <https://doi.org/10.1016/j.jrp.2018.02.002>
- Martin, S. R., Fortier, M. A., Heyming, T. W., Ahn, K., Nichols, W., Golden, C., ... & Kain, Z. N. (2022). Perfectionism as a predictor of physician burnout. *BMC Health Services Research*, 22(1), 1425. <https://doi.org/10.1186/s12913-022-08785-7>
- Melnichuk, A.S. (2017). Emocional'noe vygoranie i perfekcionizm u uchitelej: osobennosti vzaimosvyazi [The emotional burnout and perfectionism among teachers: the specific of interrelation]. *Bulletin of Psychotherapy*, 68(63), 77-94.
- Mikhailova, O. B. (2017). Professional deformation of teachers: from diagnostic strategies to prevention and correction technologies. *Life Span Disability XX*, 1, 27-43. Retrieved from http://www.lifespanjournal.it/Client/rivista/ENG92_full%20issue%20XX%201%202017.pdf#page=29
- Mikhailova, O. B., & Farennikova, E. S. (2022). Distance learning: Cross-cultural characteristics of stress resistance of Russian and Chinese students. *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)*, 10(3), 61-71. <https://doi.org/10.23947/2334-8496-2022-10-3-61-71>
- Molnar, D. S., Reker, D. L., Culp, N. A., Sadava, S. W., & DeCourville, N. H. (2006). A mediated model of perfectionism, affect, and physical health. *Journal of Research in Personality*, 40(5), 482-500. <https://doi.org/10.1016/j.jrp.2005.04.002>
- O'Connor, R. C., Rasmussen, S., & Hawton, K. (2010). Predicting depression, anxiety and self-harm in adolescents: The role of perfectionism and acute life stress. *Behaviour research and therapy*, 48(1), 52-59. <https://doi.org/10.1016/j.brat.2009.09.008>
- Orel, V.E. (2014). *Sindrom psihicheskogo vygoraniya: mify i real'nost'* [Mental burnout syndrome: myths and reality]. Kharkiv. Humanit. Publishing House center, pp. 296.
- Panina, V.V. (2020). Perfekcionizm kak ustojchivaya cherta lichnosti sovremennyh studentov [Perfectionism as a stable personality trait of modern students]. In the collection: *Sociological narrative 2020. Society in the era of turbulence: searches, threats and prospects*. Collection of articles based on the materials of the XIX All-Russian Scientific Conference of students and postgraduates. pp. 270-275.
- Permyakova, T.M., & Sheveleva, M.S. (2015). Sistematizaciya otechestvennyh issledovanij i kross-kul'turnye perspektivy izucheniya perfekcionizma [Perfectionism studies in Russia and their cross-cultural prospects]. Bulletin of Perm University. *Philosophy. Psychology. Sociology*, 22(2), 65-73.
- Rajgorodskij, D.YA. (2011). *Prakticheskaya psihodiagnostika. Metodiki i testy: uchebnoe posobie* [Practical psychodiagnostics. Methods and tests: textbook]. Samara: Publishing House 'BAHRAM-M', pp. 141-145.
- Rice, K. G., & Liu, Y. (2020). Perfectionism and burnout in R&D teams. *Journal of Counseling Psychology*, 67(3), 303-314. <https://doi.org/10.1037/cou0000402>
- Shumaker, E. A., & Rodebaugh, T. L. (2009). Perfectionism and social anxiety: Rethinking the role of high standards. *Journal of behavior therapy and experimental psychiatry*, 40(3), 423-433. <https://doi.org/10.1016/j.jbtep.2009.04.002>
- Spagnoli, P., Buono, C., Kovalchuk, L. S., Cordasco, G., & Esposito, A. (2021). Perfectionism and burnout during the COVID-19 crisis: A two-wave cross-lagged study. *Frontiers in Psychology*, 11, 631994. <https://doi.org/10.3389/fpsyg.2020.631994>
- Stoeber, J., Harris, R. A., & Moon, P. S. (2007). Perfectionism and the experience of pride, shame, and guilt: Comparing healthy perfectionists, unhealthy perfectionists, and non-perfectionists. *Personality and Individual Differences*, 43(1), 131-141. <https://doi.org/10.1016/j.paid.2006.11.012>
- Stošić, L., & Fadiya, S. O. (2017). The attitudes of students towards the use of ICT during their studies. *Rossijskij psihologicheskij zhurnal*, 14(1), 135-148. <https://doi.org/10.21702/rpj.2017.1.9>
- Stošić, L., Dermendzhieva, S., & Tomczyk, L. (2020). Information and communication technologies as a source of education. *World Journal on Educational Technology: Current Issues*, 12(2), 128-135. <https://doi.org/10.18844/wjet.v12i2.4815>
- Stumpf, H., & Parker, W. D. (2000). A hierarchical structural analysis of perfectionism and its relation to other personality characteristics. *Personality and individual differences*, 28(5), 837-852. [https://doi.org/10.1016/S0191-8869\(99\)00141-5](https://doi.org/10.1016/S0191-8869(99)00141-5)
- Suddarth, B. H., & Slaney, R. B. (2001). An investigation of the dimensions of perfectionism in college students. *Measurement and Evaluation in Counseling and development*, 34(3), 157-165. <https://doi.org/10.1080/07481756.2002.12069032>
- Suh, H., Liou, P. Y., Jeong, J., & Kim, S. Y. (2022). Perfectionism, Prolonged Stress Reactivity, and Depression: A Two-Wave Cross-Lagged Analysis. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 1-15. <https://doi.org/10.1007/s10942-022-00483-x>
- Terry-Short, L. A., Owens, R. G., Slade, P. D., & Dewey, M. E. (1995). Positive and negative perfectionism. *Personality and individual differences*, 18(5), 663-668. [http://dx.doi.org/10.1016/0191-8869\(94\)00192-U](http://dx.doi.org/10.1016/0191-8869(94)00192-U)
- Tomczyk, Ł., Sztokowski, R., Stošić, L., Maksimović, J., & Počuca, M. (2022, January). Problematic use of social networking sites among adolescents in the czech republic versus offline risk behaviour and parental control. In *International Conference on Psychology, Learning, Technology* (pp. 63-79). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-15845-2_4

Mikhailova O.B., & Farennikova E.S. (2023). Characteristics of students' burnout and perfectionism in China and Russia, *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)*, 11(2), 281-289.

Vodopyanova, N. E., & ES, S. (2008). *Sindrom vygoraniya: diagnostika i profilaktika* [Burnout syndrome: diagnostics and prophylaxis]. Sankt Petersburg, Piter Publ. 358.

Yasnaya, V. A., & Enikolopov, S. N. (2007). Perfectionism: history of research and current state of the problem. *Voprosy psikhologii*, 4, 157-168. <https://www.elibrary.ru/item.asp?id=18914500>