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Academic Motivation in Relation to Burnout Among Russian and Azerbaijani Higher Education Students

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Student burnout is a risk factor for personal well-being and can lead to a decrease in motivation and other crucial components of learning. We present the results of a study of the relationship between academic motivation and burnout in the Russian (N=203) and Azerbaijani (N=170) samples. Motivation profiles were compared to profiles of burnout and study-related experiences. Students from two profiles with the highest level of intrinsic motivation, but different levels of motivation of self-esteem (high — 32% of the total sample, or low — 20%) experienced either no burnout, or high exhaustion along with high meaningfulness of learning in both cases. Students with predominance of external motivation (20%) or amotivation (9%) turned out to be more prone to burnout, showing a high level of emotional exhaustion along with an average or complete loss of the meaning of their own educational activities. Among students with an average profile (18%), the main symptom was a decrease in the meaningfulness of study that was in some cases linked to other symptoms of burnout. The results were similar in both samples, with the profiles with high levels of self-esteem being more typical of female students. The limitations of the obtained results are discussed, as well as the relevance of burnout prevention in universities.

Keywords: academic motivation, burnout, study-related experiences.

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Связь академической мотивации и выгорания у студентов российских и азербайджанских вузов

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Представлены результаты исследования связи академической мотивации и выгорания на российской (N=203) и азербайджанской (N=170) выборках. Авторы исходили из того, что выгорание является серьезной угрозой для психологического благополучия студентов, в том числе для их академической мотивации, поэтому мониторинг мотивации и выгорания является актуальной задачей в любой стране. В данном исследовании профили мотивации сопоставлены с профилями выгорания и переживаний в учебе: студенты с самыми высокими показателями внутренней мотивации, но разным уровнем мотивации самоуважения (высоким — 32% общей выборки либо низким — 20%) показали либо отсутствие признаков выгорания, либо заметное эмоциональное истощение при высокой осмысленности деятельности в обоих случаях; более подверженными выгоранию оказались студенты с преобладанием внешней мотивации (20%) или амотивации (9%), показав высокий уровень эмоционального истощения на фоне средней либо полной потери смысла собственной учебной деятельности; у студентов с невыраженным, усредненным профилем (18%) основным признаком оказалось снижение осмысленности учебы, в ряде случаев сцепленное с другими признаками выгорания. Сходная картина была получена в обеих выборках, причем для девушек более характерны профили с высоким уровнем мотивации самоуважения, а для юношей — наоборот. Обсуждаются ограничения полученных результатов, а также необходимость профилактики выгорания в вузах.

Ключевые слова: академическая мотивация, эмоциональное выгорание, переживания в учебной деятельности.

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Introduction

Academic motivation might be viewed as a complex hierarchy of internal and external reasons to study. It comprises intrinsic motives and those related to self-respect and recognition from others, extrinsic motives in-

cluding introjected ones related to social and cultural norms and requirements, and external motives related to expectations and pressure from family members, administrators or other circumstances [2; 18]. Academic burnout is a negative individual experience which can be attributed mostly to emotional exhaustion, cynicism towards learning and self-inefficacy, but also to some other feelings, motives and expectations [6; 15].

In 2020-2021, we witnessed a unique natural experiment. The spread of COVID-19 in Russia in the spring of 2020 caused most of the universities to lock down and the educational mechanism started to adjust to remote management. The first term of the 2020/2021 academic year began with a few attempts to return to full-time education, which did not succeed, and most of the universities had to go back to distance-based education or a mix of both formats. To keep up with their online studies, students had to find appropriate technical resources and relied upon network stability. Well-established interactions between administration, faculty and students were broken. Everyone began to change their ways of teaching, learning and communicating in accordance with the new circumstances. However, students faced difficulties in adaptation for many reasons, including the increase of social deprivation and isolation, and hypodynamia caused by the necessity to spend hours in front of a computer screen. They needed to stay alert while waiting for their turn to be asked questions and feared missing their lessons if their internet connection was unstable. By the second (spring) term, some universities returned to almost normal functioning, while some features of distance learning remained in the educational process.

COVID-19 brought changes to the financial status of many families, led to illness and the loss of relatives and friends, and affected individual health issues; it caused mental and physical stress and challenged students' values and reasons to continue studying. We assumed that the pandemic and its consequences could also expose the full variation of students' academic motivation and burnout. Therefore, we established two goals of the study. First, we aim to describe patterns of academic motivation and patterns of burnout related to study during the COVID-19 pandemic. Second, we will compare those profiles across Russian and Russian-speaking Azerbaijani students.

Higher education in Azerbaijan is similar to that in Russia, given that historically they inherit a common Soviet past. There are universities in Baku, Azerbaijan where training is given in Russian, some even affiliated with Russian university programs. These are not reasons to expect complete similarity in the motivation and burnout profiles of Russian and Azerbaijani students, but we find it reasonable to compare them.

We follow the personal oriented approach, where an analysis of separate types of motivation through different conditions or in different professional and social groups is replaced by an analysis of patterns or profiles of motivation. This approach affords a more complex and personal view of academic motivation [18] as well as burnout [14; 20]. The number and distribution of profiles across the population varies from one study to another: you may find profiles with a predominance of intrinsic motivation or extrinsic motivation, those with medium levels of both, and others with a high level of amotivation on the contrary [3; 4; 17]. Profiles of burnout may additionally include specific scales like study engagement [20], students' interest [11], quality of life [13], or features specific to a certain culture, such as anxiety and negative attitudes toward academic activities in Korean students [12]. Four profiles are common across the studies. They show different proportions of exhaustion, cynicism and self-inefficacy: high levels of all three, high exhaustion with low cynicism or vice versa, and no burnout at all.

Research design

We collected data from November 2020 to April 2021. A total of 373 1st to 4th year students from Baku, Azerbaijan (az, N=170) and several cities in Russia (rus, N=203), all aged 16-24 years (M=19.6, SD=1.5), took part in

the research. Most of the participants were women (az, 72%; rus, 77%). Different educational specializations were represented: social and human sciences (50%), natural and technical sciences (30%) and the rest were mathematics, medicine and art. Participation was voluntary.

We used the Academic Motivation Scale (AMS-rus) by Gordeeva, Sychev and Osin, based on the AMS-C that was developed by Vallerand et al. [5]. The AMS-rus consists of seven scales, including three facets of intrinsic motivation: learning, achievement and self-development motivation; three facets of extrinsic motivation: self-respect, introjected and external motivation; and amotivation. Each is represented by four items, giving a total of 28 items assessed on a 5-point scale.

To assess burnout, we used three questionnaires and modified them for the academic context: Professional Burnout (PB) by Vodopyanova and Starchenkova, based on Maslach and Jackson's model of burnout [1]; the Russian adaptation of Salmela-Aro's School Burnout Inventory (SBI-rus) by Osin [7; 19]; and the Experiences in Activity Questionnaire (EAQ) by Osin and Leontiev [8]. The seven scales were *Exhaustion* (emptiness and loss of energy) and *Reduction of personal achievements* (low evaluation of one's accomplishments, loss of meaning and a reduction of effort put into work) from PB; *Exhaustion, Cynicism* and *Sense of inadequacy* from SBI-rus; and subjective experiences of *Meaning* (level of engagement in wide personally-significant contexts) and *Effort* (relates to effectiveness and achievement of valuable results) from EAQ.

The survey was conducted online via Google Forms. We added some questions about the students' choices of university and specialization, the online learning experience, the difficulty of study, and so on. The platform does not log incomplete forms, so we are unaware of the number of participants who did not succeed in filling out the form.

Our main hypotheses are as follows:

1. Intrinsic motivation and amotivation should be strongly associated with meaningfulness of educational activity, namely cynicism and meaning: high intrinsic motivation is impossible without experiencing the meaning of learning, and amotivation, by definition, manifests itself as a loss of meaning.

2. Extrinsic motivation (primarily introjected and external), and amotivation should be associated with the experience of effort.

3. Complex relationships between academic motivation and burnout will be found after analysis at the level of typical profiles.

Results

Academic motivation of Russian and Azerbaijani students. AMS-rus scales proved to be reliable (see Table 1), except for *External motivation*, which includes one item that did not fit the scale in the Azerbaijani sample. Distributions were skewed: high scores prevailed in the scales of intrinsic motivation, while amotivation had extremely low scores. Scales of extrinsic motivation have negative kurtosis.

The Russian sample showed slightly higher levels of learning motivation than the Azerbaijani sample. Other scales did not differ between the two groups; therefore, we combined them to perform some further analysis.

Academic motivation and burnout relation. PB, SBI-rus and EAQ scales showed satisfactory reliability, except for the scales for *Reduction of personal achievements* (PB, α=0.688) and *Sense of inadequacy* (SBI-rus, α=0.590). After one item was dropped from the first scale, it showed good reliability (α=0.810). The remaining seven items described the student's ability to mediate communication within academic group and between students and faculty, their attitude to help others to study well and their positive point of view. We decided to keep the scale and to change its label to *Personal achievements*. The other scale was excluded from the analysis, so that only two scales from the SBI-rus remained: *Emotional exhaustion* and *Cynicism* both showed reasonable reliability (α=0.744 and α=0.905, respectively).

Principal component analysis of PB, SBI-rus and EAQ scales extracted two factors

Table 1

AMS-rus: Descriptives and Cronbach's α

Motivation Scale	Rus N=203	Az N=170	Total N=373	Cronbach's α		
	M (SD)	M (SD)	M (SD)	rus	az	total
Learning*	15.7 (3.9)	14.3 (4.0)	15.1 (4.0)	0.893	0.891	0.894
Achievement	14.4 (4.4)	13.4 (4.1)	14.0 (4.3)	0.919	0.887	0.906
Self-development	14.8 (4.5)	15.1 (4.0)	14.9 (4.3)	0.887	0.876	0.882
Self-respect	13.5 (4.9)	13.0 (4.9)	13.3 (4.9)	0.874	0.881	0.877
Introjected	11.6 (4.5)	12.0 (4.0)	11.8 (4.3)	0.782	0.683	0.739
External	10.3 (4.2)	10.8 (4.0)	10.5 (4.1)	0.713	0.621	0.673
Amotivation	8.0 (4.7)	8.2 (4.6)	8.1 (4.6)	0.892	0.893	0.892

Note. * significant difference between two groups: $t(371)=3.632$, $p<0.001$, $\eta^2=0.034$.

(meaning and effort) without emotional exhaustion as an independent factor (see Appendix). In order to keep a more complete view of the data, we decided to include all six scales. We did not obtain any significant differences between correlation matrixes of the academic motivation and burnout scales in the Russian and Azerbaijani samples, so we combined them together (Table 2).

The scales of intrinsic motivation and *Amotivation* similarly correlated with the scales of burnout and experience in learning, except for the sign. The strongest association between *Learning* motivation and *Amotivation*, on the one hand, and *Cynicism* and *Meaning*, on the other hand, indicates that the meaningfulness of learning is essential to all four of them. *Amotivation* had a mildly positive correlation with *Exhaustion* and a negative correlation with *Personal achievements*. For the scales of intrinsic motivation, these associations are opposite and weaker. Notably, the *Achievement* and *Self-development* motivations were more related to *Personal achievements* than *Learning* motivation. Neither intrinsic motivation scales nor *Amotivation* were correlated with the experience of *Effort*.

Scales of extrinsic motivation weakly were correlated with *Effort*. Except for that, *External* and *Introjected* motivation showed a pattern of associations with burnout that is similar to that of *Amotivation,* although less pronounced: they are positively associated with both scales of *Exhaustion* and with *Cynicism*, and *External* motivation was negatively associated with *Personal achievements*. On the contrary, the motivation of *Self-respect* showed significant positive correlations with *Personal achievements* and the experience of *Meaning*, and it had a small negative correlation with *Cynicism*, which makes it similar to the intrinsic motivation scales.

In accordance with our hypotheses, meaningfulness of learning correlated with intrinsic motivation and amotivation, and the experience of effort solely correlated with extrinsic motivation. Self-respect is a special type of motivation: it relates to meaningfulness of learning slightly less than intrinsic motivation, but it is uniquely independent from exhaustion.

Academic motivation profiles. K-means cluster analysis divided the sample into five groups[1] (Figure 1). The profiles names are arbitrary; they match the scales with highest scores within the group. In order of decreasing intrinsic motivation:

1. The high intrinsic motivation and high Self-Respect profile (HighIM_HighSR, 32.2%)

[1] The number of clusters was defined by the results of Ward hierarchical clustering (Euclid-squired distance). The same procedure was used for burnout scales clustering.

Table 2

Correlations between AMS-rus and burnout (Pearson R, N=373)

Scales	8	9	10	11	12	13
Academic motivation scales (AMS-rus)						
1. Learning	-.371**	.373**	-.266**	-.654**	.714**	.067
2. Achievement	-.394**	.462**	-.334**	-.544**	.646**	-.040
3. Self-development	-.372**	.514**	-.265**	-.541**	.692**	.059
4. Self-respect	-.013	.255**	.033	-.205**	.395**	.239**
5. Introjected	.216**	-.054	.256**	.184**	-.084	.308**
6. External	.436**	-.268**	.375**	.485**	-.443**	.231**
7. Amotivation	.533**	-.400**	.415**	.825**	-.756**	.092
Burnout						
8. Exhaustion (PB)	1					
9. Personal achievements (PB)	-.469**	1				
10. Exhaustion (SBI-rus)	.719**	-.357**	1			
11. Cynicism (SBI-rus)	.613**	-.414**	.543**	1		
Experiences in Activity Questionnaire (EAQ)						
12. Meaning	-.446**	.535**	-.326**	-.737**	1	
13. Effort	.338**	-.087	.417**	.121*	.054	1

Note. ** p<0.001, * p<0.05 (2-sided).

showed an average level of introjected motivation and the lowest scores of amotivation.

2. The high intrinsic motivation and low Self-Respect profile (HighIM_LowSR, 20.1%) showed slightly lower scores on the intrinsic motivation scales compared to the first one, low extrinsic motivation and amotivation.

3. The high extrinsic motivation profile (HighEM, 20.4%) combined slightly below average scores of intrinsic motivation with relatively high extrinsic motivation, including the highest level of introjected motivation among the profiles and above average amotivation.

4. The indistinct motivation profile (Indistinct, 18.2%) united students with similar scores across all scales: lower intrinsic and self-respect motivation, and average introjected motivation, external motivation and amotivation.

5. The high external motivation and amotivation profile (HighEx_HighAm, 9.2%) mirrors the first one; it shows the lowest scores of intrinsic motivation and highest scores of external motivation and amotivation.

We compared the proportion of profiles of academic motivation in the Russian and Azerbaijani samples as well as in male/female groups (see Table 3). Profiles with high intrinsic and extrinsic motivation were slightly more frequent in the Russian sample, whereas the Indistinct profile was much more typical in the Azerbaijani sample ($\chi^2(4)=9.882$, $p=0.042$).

Comparing the academic motivation of males and females could be complicated due to large difference in the sample sizes. Analysis of the profiles solved this problem and revealed significant differences between the two samples. The direction of the differences was the same in the Russian ($\chi^2(4)=10.841$, p=0.028) and Azerbaijani ($\chi^2(4)=15.236$, p=0.004) samples, but they varied in extent. We found the profiles with a higher level of motivation of self-respect to be more common for female students, with both pronounced intrinsic (HighIM_HighSR, az) and pronounced extrinsic motivation (HighEM, rus). On the contrary, the profiles with lower scores on motivation of self-respect were more common for

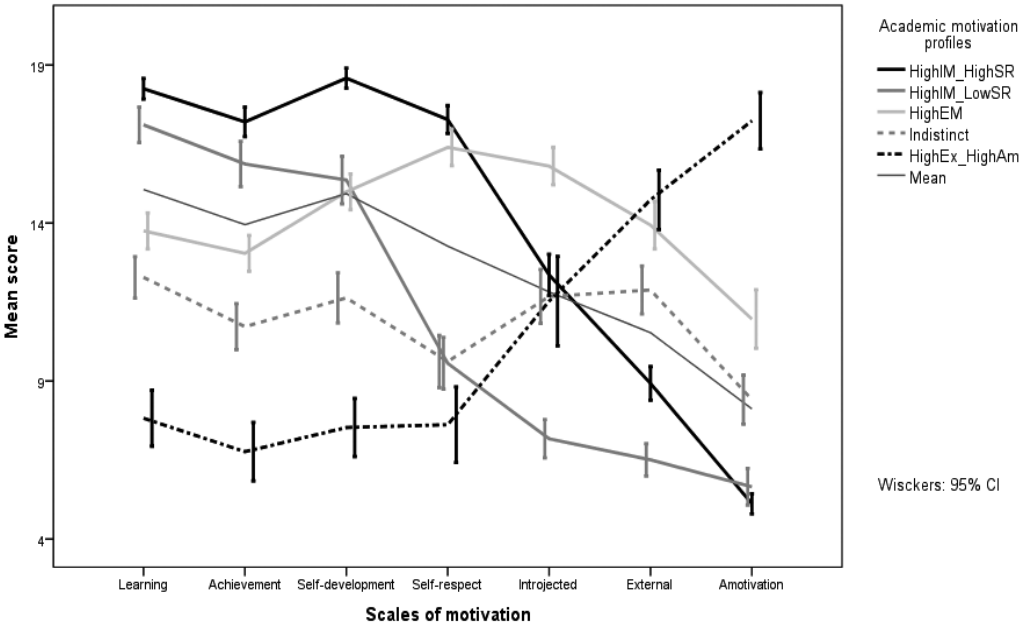

Figure 1. Five cluster profiles of AMS-rus: Means and Cis

Table 3

Distribution of academic motivation profiles in Russian and Azerbaijani male and female samples (columns represent percentage of sample size, N)

Academic motivation profile	Sex		Total
	Female	Male	
Rus			
HighIM_HighSR	34.0	31.9	33.5
HighIM_LowSR	19.9	34.0	23.2
HighEM	26.3	6.4	21.7
Indistinct	11.5	17.0	12.8
HighEx_HighAm	8.3	10.6	8.9
N	156	47	203
Az			
HighIM_HighSR	37.7	12.5	30.6
HighIM_LowSR	14.8	20.8	16.5
HighEM	20.5	14.6	18.8
Indistinct	18.9	39.6	24.7
HighEx_HighAm	8.2	12.5	9.4
N	122	48	170
Total N	278	95	373

male students, especially in Indistinct (az) and HighIM_LowSR (rus) profiles, but also in the profile with high external motivation and amotivation (HighEx_HighAm).

We suggest that these results indicate the existence of some factors which are not registered in the present study, but which might be important for explaining the differences between students. These are social factors such as social expectations and requirements that differ between boys and girls and between men and women, and that may come from family, friends, the media or faculty members and administration; they affect one's learning behavior and attitude towards education.

Burnout[2] **profiles.** We used the same analysis as for AMS-rus to cluster students by their scores on the PB, SBI-rus and EAQ (Figure 2). All of the scales were transformed to make them comparable within a 0- to 100-point scale without standardization of variance. For every scale, the formula was: $100*(x_i\text{-min})/(\text{max-min})$, where x_i is a personal score on the X scale, min is the minimum score of X, and max is the maximum score of X.

Scales that communicate the meaningfulness of learning (*Cynicism* from SBI-rus and *Meaning* from EAQ) appeared to be the most important for clustering. Scales of exhaustion were also important, and the least important role in differentiation was played by *Effort* (EAQ) and *Personal achievement* (PB). K-means revealed five clusters:

1. A burnout-free profile (No_B, 28.4%) gathered the students with the highest meaningfulness of learning, a low level of exhaustion and an average experience of effort.

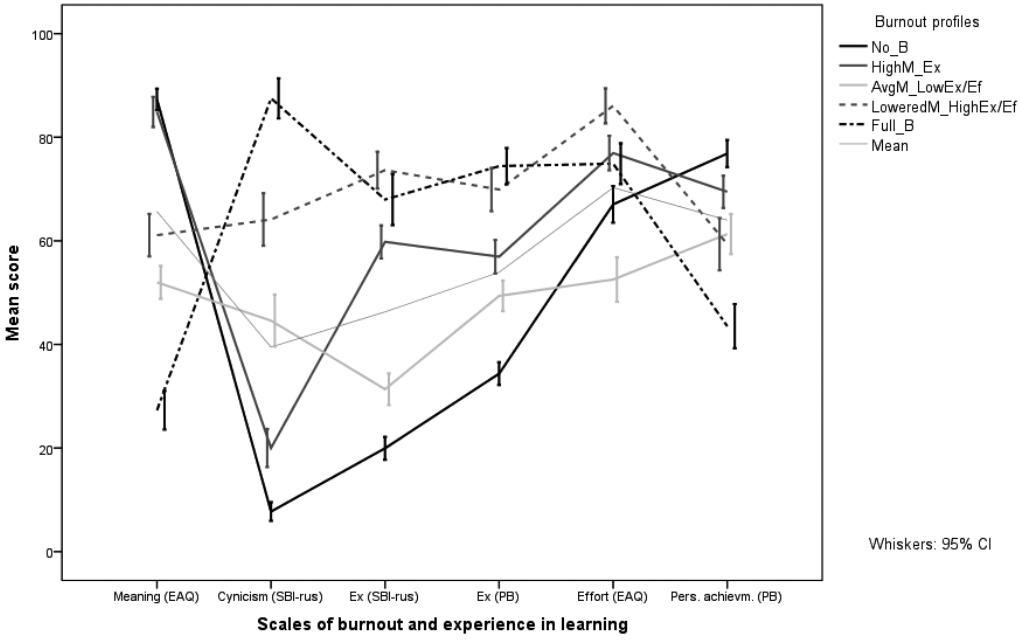

Figure 2. Profiles of burnout and experience in learning: Means and CIs. Ex: exhaustion

[2] We labeled all measures of burnout and experience in learning under one label of burnout in order to simplify the description of results. Nevertheless, we fully understand that this label is applied to a continuum of states, from shallow signs of burnout to severe burnout, a decease [21]. We use the terms high/low burnout to address relative differences between the profiles.

2. A high meaningfulness and exhaustion profile (HighM_Ex, 19.8%) united students with higher levels of exhaustion and effort compared to the first profile.

3. An average meaningfulness and below average exhaustion and effort profile (AvgM_LowEx/Ef, 19.8%) showed the lowest scores of effort experience.

4. A lowered meaningfulness and high exhaustion and effort profile (LoweredM_HighEx/Ef, 14.7%) showed the highest scores of effort experience, unlike the previous profile.

5. A low meaningfulness and high exhaustion profile (Full_B, 17.2%) had the most extreme levels of burnout in the sample, except for the *Effort* scale.

The profiles of academic motivation and burnout showed high consistency, both in the Russian ($\chi^2(16)=145.687$, $p<0.001$) and Azerbaijani samples ($\chi^2(16)=130.369$, $p<0.001$); see Table 4. The high intrinsic motivation and self-respect profile is related mostly to the profiles with no burnout or with considerable exhaustion (No_B and HighM_Ex). The high intrinsic motivation with low self-respect profile showed similar but lower associations, and it also co-occurred with the AvgM_LowEx/Ef profile. More than half of the cases of the extrinsic motivational profile demonstrated high levels of exhaustion and effort experience, with more or less lowered meaningfulness of learning. Students with the Indistinct profile of academic motivation divided into two main groups: those who do not put much effort into study (AvgM_LowEx/Ef burnout profile), and those who study harder and experience a drop in meaningfulness, relatively high exhaustion and effort, and who nevertheless might not get the desirable results (LoweredM_HighEx/Ef). The group of students from the last profile of academic motivation associated with external and amotivation showed 80-90% overlap with the group of students who demonstrated the full picture of burnout (Full_B).

Table 4

Contingency tables of motivational and burnout profiles in Russian and Azerbaijani samples (rows show percentage of subsample size, N)

Academic motivation profile	No_B	HighM_Ex	AvgM_ LowEx/Ef	LoweredM_ HighEx/Ef	Full_B	N
Rus						
HighIM_HighSR	51.5	30.9	11.8	5.9	0.0	68
HighIM_LowSR	42.6	25.5	21.3	6.4	4.3	47
HighEM	9.1	11.4	15.9	36.4	27.3	44
Indistinct	3.8	11.5	34.6	30.8	19.2	26
HighEx_HighAm	0.0	0.0	5.6	5.6	88.9	18
% (burnout)	29.6	20.2	17.2	15.8	17.2	203
Az						
HighIM_HighSR	51.9	38.5	5.8	3.8	0.0	52
HighIM_LowSR	46.4	21.4	21.4	7.1	3.6	28
HighEM	6.3	15.6	25.0	28.1	25.0	32
Indistinct	9.5	4.8	45.2	23.8	16.7	42
HighEx_HighAm	0.0	0.0	18.8	0.0	81.3	16
% (burnout)	27.1	19.4	22.9	13.5	17.1	170

Discussion

The overall picture shows that emotional exhaustion can manifest itself along with any motivational dominant, even if it is a predominance of intrinsic motivation. The trend we see is that the less meaningful and more externally driven the students' motivation is, the higher the risks of burnout they face. In the context of burnout, we get a clue to understanding the motivation of students with the Indistinct motivational profile. Apparently, this group unites those who study more or less meaningfully without making any special efforts and without experiencing emotional exhaustion, and those who put a lot of effort and emotional resources into study without a clear understanding of its purpose. This distinction needs to be tested.

We see that over half of the students across different profiles of academic motivation experience exhaustion. There is only a small number of students with the full picture of burnout and negative academic motivation, namely high external motivation and amotivation. Nevertheless, we suggest that some steps need to be taken to reduce this number: 1) improvement in the quality of career guidance and the presentation of universities in schools to reduce the number of students who "feel out of place", and 2) systematic prevention of burnout in universities, which involves working not only with students but also with faculty and staff, and in some cases implies the need for organizational changes.

The Russian and Azerbaijani samples differ firstly by the ratio of different motivational profiles in the male/female subsamples, and secondly by the prevailing combinations of motivation and burnout profiles. For a more detailed analysis of these differences, we need to conduct additional research, which should take into account evidence of both the similarity [16] and differences between the two cultures [9; 10].

Limitations of the study: a) we used only self-report methods, with no control for the social desirability effect; and b) stress related to burnout could be caused by stressors other than learning, such as the pandemic or the war in Nagorno-Karabakh. Furthermore, data were collected from volunteers, which questions the representativeness of the sample, especially concerning the male/female proportion. We do not have any information about the students' universities and specializations, and thus we cannot identify the real proportion of the profiles in the population, and therefore we do not know how widespread burnout may be among students.

Conclusions

We described profiles of academic motivation and burnout and their co-occurrence. In our study, we cannot explain the prevalence of different profiles in the Russian and Azerbaijani student samples or in the male and female groups; thus, these differences should be addressed in future studies.

1) The results support our initial hypothesis that the meaningfulness of learning is the key factor in the opposition between intrinsic motivation and amotivation.

2) Extrinsic motivation is associated with the experience of effort.

3) One profile of motivation can be associated with different levels of burnout, especially exhaustion. The more extrinsic motivation or amotivation prevail in a profile, the more severe the burnout.

4) The presence of emotional exhaustion does not depend on the prevailing motivation, and this allows us to put forward a hypothesis that its sources are different with the predominance of intrinsic motivation and with the predominance of extrinsic motivation.

The experience of both single and multiple signs of burnout that is common to a large number of students emphasizes the importance of preventing burnout syndrome, while the high level of amotivation can be considered as one of the important markers of burnout.

Appendix

PCA with Varimax rotation was performed on the PB, SBI-rus and EAQ scales. It shows good two factor structure (KMO 0.733, $\chi^2(15)=1018.638$, $p<0.001$), see table A1.

Table A1

Factor loadings on PB, SBI-rus and EAQ scales after rotation

Scale (questionnaire)	F1	F2
Exhaustion (PB)	**-0.614**	**0.626**
Personal achievements (PB)	**0.712**	-0.127
Exhaustion (SBI-rus)	**-0.463**	**0.742**
Cynicism (SBI-rus)	**-0.835**	0.246
Meaning (EAQ)	**0.905**	0.059
Effort (EAQ)	0.139	**0.872**

The first factor explained 44% of variance and consisted of the scales related to meaningfulness of learning. The second factor was mainly defined by experience of effort (EAQ) and exhaustion, it explained 30% of variance. Exhaustion failed to become an independent factor; instead, its variance was divided between the other two factors, and either accompanied *Effort* or contrasted the *Meaning*. The factor of effort was weakly correlated with only extrinsic motivation and amotivation (table A2), so it did not seem to be valuable in the context of the present study.

Table A2

Correlations between AMS-rus and factors of burnout (R Пирсона, N = 373)

AMS-rus	Meaningfulness of learning	Effort experience
Learning	0.701**	0.033
Achievement	0.643**	-0.077
Self-development	0.694**	0.030
Self-respect	0.365**	0.266**
Introjected	-0.077	0.323**
External	-0.442**	0.282**
Amotivation	-0.772**	0.155**

Note. ** p<0.001 (2-sided)

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