

## RISK AND PROTECTIVE FACTORS FOR ACADEMIC BURNOUT: THE SEARCH FOR EFFECTIVE PSYCHOLOGICAL HELP FOR STUDENTS

Hanna Pawlicka<sup>1</sup>, Kamilla Komorowska<sup>2</sup>, Maciej Michalak<sup>3</sup>,  
Agnieszka Gabrys<sup>4</sup>, Paweł Larionow<sup>5</sup>

### Abstract.

**Introduction:** Students are increasingly facing psychological problems and experiencing academic burnout. In order to design effective psychological help for students, it is necessary to identify risk factors (e.g., health symptoms) and protective factors (e.g., personal and study-related resources) against academic burnout. The aim of this study was to determine the role of selected psychological factors, including risk factors and protective factors, in academic burnout.

**Material and methods:** The study involved 350 students of the Kazimierz Wielki University in Bydgoszcz, (263 women, 82 men, and 5 non-binary people), ranging in age from 17 to 53 years ( $M = 22.84$ ,  $SD = 4.65$ ). A set of self-report questionnaires was used to examine students' psychological resources (e.g., vitality, passion for studying) and health symptoms (e.g., somatic symptoms). The most significant psychological factors associated with academic burnout were identified using regression analysis. Using qualitative questions, factors that positively and negatively affect students' subjective well-being in college were analysed.

---

<sup>1</sup> Wydział Psychologii, Uniwersytet Kazimierza Wielkiego w Bydgoszczy (Faculty of Psychology, Kazimierz Wielki University in Bydgoszcz), ORCID: 0009-0008-0392-1186.

<sup>2</sup> Wydział Psychologii, Uniwersytet Kazimierza Wielkiego w Bydgoszczy (Faculty of Psychology, Kazimierz Wielki University in Bydgoszcz), ORCID: 0000-0002-1807-6279.

<sup>3</sup> Wydział Psychologii, Uniwersytet Kazimierza Wielkiego w Bydgoszczy (Faculty of Psychology, Kazimierz Wielki University in Bydgoszcz), ORCID: 0000-0001-9147-5420.

<sup>4</sup> Instytut Pedagogiki, Wydział Pedagogiki i Psychologii, Uniwersytet Marii Curie-Skłodowskiej w Lublinie (Institute of Pedagogy, Faculty of Pedagogy and Psychology, Maria Curie-Skłodowska University in Lublin), ORCID: 0000-0002-8502-71.

<sup>5</sup> Wydział Psychologii, Uniwersytet Kazimierza Wielkiego w Bydgoszczy (Faculty of Psychology, Kazimierz Wielki University in Bydgoszcz), ORCID: 0000-0002-4911-3984.

---

Mailing address: Hanna Pawlicka  
hanna.pawlicka@student.ukw.edu.pl

**Results:** There was a high prevalence of positive screening results for symptoms of anxiety (57.14%) and depression (45.43%). Almost all of the risk factors analysed, including somatic complaints, stress, depression, and anxiety symptoms, were associated with higher levels of academic burnout. In contrast, protective factors against burnout, including vitality, resilience, general academic self-efficacy, and harmonious passion for studying, were associated with lower levels of academic burnout. The regression analysis showed that harmonious passion for studying was the most significant predictor of low levels of academic burnout.

**Conclusions:** The study highlighted the importance of harmonious passion for the prevention of academic burnout and pointed to the necessity of conducting regular (screening) studies of mental and somatic health, which seems important for creating effective ways to prevent academic burnout in students.

**Keywords:** screening analysis, psychological factors, passion for studying, students, college, somatic symptoms, psychological support, academic burnout, personal resources, mental health

## Introduction

According to the report published in 2020 by the Commissioner for Patients' Rights in Poland (Rzecznik Praw Pacjenta, 2020), students are confronted with issues such as low self-esteem, stress, suicidal ideation, anxiety disorders, depression, adjustment difficulties, and personality disorders. Students may also experience academic burnout which involves symptoms of exhaustion and reduced engagement in studies due to prolonged exposure to the specific demands of the university environment (Oloidi et al., 2022). The prevalence of academic burnout among students represents a considerable social issue, highlighting the need for research into the phenomenon, particularly to identify both the risk factors and protective factors associated with it.

At present, there is no single, universally applicable model of academic burnout that incorporates the etiological processes associated with the phenomenon (Çam and Öğülmüş, 2019). Prior research on academic burnout was based on models of occupational burnout (Jagodics et al., 2023; Jagodics and Szabó, 2023). For example, the Job Demands-Resources Model of burnout posits that an employee's resources, including personal and job resources, as well as the psychophysiological demands of the job, exert a significant influence on the level of burnout (Bakker and Demerouti, 2007). Occupational burnout, like academic burnout, is comprised of two dimensions: exhaustion and disengagement (Oloidi et al., 2022). Exhaustion is a consequence of the job demands exceeding the employee's capabilities whereas disengagement is the result of an insufficient supply of resources, both on the personal and organizational level (Bakker and Demerouti, 2007). The Demands-Resources model can be effectively adapted to the study of academic burnout, as highlighted in previous studies (Jagodics et al, 2023; Jagodics and Szabó, 2023; Salmela-Aro and Upadaya, 2014). This model was used in the present study to investigate the correlates of academic burnout.

The correlates of academic burnout include both risk and protective factors. Research to date (see Table 1) indicates that elevated levels of academic burnout are associated with diminished levels of resilience (Mun and Kim, 2022), vitality (Shah et al., 2018), academic efficacy (Safarzaie et al., 2017), and self-esteem (Mun and Kim, 2022), as well as study-related resources, including passion for studying (Stoeber et al., 2011). Higher levels of academic burnout are also associated with higher levels of academic stress (Fariborz et al., 2019), anxiety (Kordzanganeh et al., 2021) and depression symptoms (Cheng et al., 2020), as well as somatic symptoms (Bolatov et al., 2022). Academic burnout is also associated with increasingly lower motivation to continue education (Schaufeli and Bakker, 2004). The experience of academic burnout has been linked to a range of adverse outcomes for students, including fatigue, pessimistic attitudes, and a diminished sense of self-efficacy (Oloidi et al., 2022). Furthermore, the probability of these students leaving the university without completing their studies is also elevated (Bumbacco and Scharfe, 2023). This suggests that academic burnout should be considered a significant factor in understanding the quality of students' academic performance.

Table 1. Selected correlates of job and academic burnout, including risk and protective factors and their interdependencies

Category	Factor	Author and year of publication	Selected findings
	Stress	Fariborz et al. (2019)	Stress is strongly and positively associated with academic burnout. In addition, high stress can exacerbate the symptoms of other illnesses as well as mental disorders in students.
		Mudło-Głagolska and Larionow (2023)	Higher levels of perceived stress are associated with lower levels of subjectively perceived vitality.
	Risk factors	Depression symptoms	Cheng et al. (2020)
	Anxiety symptoms	Kordzanganeh et al. (2021)	Higher levels of academic burnout are associated with higher levels of anxiety symptoms. A deficiency in time management skills has been identified as a potential predictor.
	Somatic symptoms	Hammarström et al. (2023)	Somatic symptoms co-occur with occupational burnout.

cont. tab. 1

Category	Factor	Author and year of publication	Selected findings
Protective factors	Resilience (mental toughness)	Mun and Kim (2022)	Academic burnout is negatively associated with resilience.
		Trigueros et al. (2020)	Higher levels of resilience are associated with lower risk of academic burnout and lower levels of stress and anxiety symptoms.
	Vitality	Mudło-Głagolska and Larionow (2023)	Students who have higher levels of subjective vitality are characterised by lower levels of exhaustion and disengagement.
	Academic efficacy	Doo and Bonk (2020)	A higher sense of academic efficacy is related to lower depression, anxiety, and stress symptoms.
	Self-esteem	Moksnes and Reinstates (2019)	Lower levels of self-esteem are a significant predictor of more frequent anxiety and depression symptoms in adolescents. Individuals with higher levels of self-esteem also show higher resilience to stress and negative mood.
	Passion for studying	Stoeber et al. (2011)	Students with harmonious passion have higher levels of commitment and absorption in their studies and lower levels of cynicism than students with obsessive passion. In contrast, students with obsessive passion are characterised by higher levels of absorption, vigour, and self-efficacy compared to students with harmonious passion.
	Optimism	Tuckwiller and Dardick (2018)	Students with high levels of anxiety and depression symptoms are characterised by a lower sense of optimism and a higher sense of pessimism.

The above data indicate that academic burnout plays an important, albeit detrimental, role in students' lives. To implement effective psychological support for students, there is a need to identify the psychological correlates of academic burnout, including potential risk and protective factors against academic burnout. This is important in order to outline effective psychotherapeutic goals.

Table 2. Sociodemographic characteristics of the sample

Sociodemographic variables		<i>M</i>	<i>SD</i>	Min.	Max.
Age		22.84	4.65	17	53
		<i>n</i>		<i>%</i>	
Sex / gender	Women	263		75.14	
	Men	82		23.43	
	Non-binary	5		1.43	
Place of residence	Village	94		26.86	
	Small town (up to 20.000 inhabitants)	43		12.29	
	Medium-sized city (20.000 to 100.000 inhabitants)	52		14.86	
	Large city (more than 100.000 inhabitants)	161		46.00	
Mode of study	Full-time	298		85.14	
	Part-time	52		14.86	
Study program	Social sciences	167		47.71	
	Humanities	122		34.86	
	Technical	21		6.00	
	Exact sciences	17		4.86	
	Medical and health sciences	17		4.86	
Number of simultaneous study programs	Natural sciences	6		1.71	
	One	344		98.29	
Professional activity	Two	6		1.71	
	Studying only	171		48.86	
	Studying and working	179		51.14	

The study aimed to: (1) identify the psychological correlates of academic burnout, including potential risk (obsessive passion, somatic symptoms, stress, and anxiety and depression symptoms) and protective factors (harmonious passion, self-esteem, vitality, academic efficacy, and optimism) in students; (2) determine the most significant predictors of academic burnout among these factors; (3) conduct a screening

assessment of somatic, anxiety, and depression symptoms; and (4) carry out a qualitative analysis of the role of various factors that positively and negatively affect university students' well-being.

## Material and methods

### Procedure

The Research Ethics Committee of the Faculty of Psychology at Kazimierz Wielki University in Bydgoszcz approved the study (opinion no. 2/14.03.2023). Participation in the study was anonymous and voluntary. Students were not compensated for their participation.

The study was cross-sectional in nature and was carried out from January to May 2023 on a sample of full-time and part-time students at Kazimierz Wielki University in Bydgoszcz. A link to the study was sent out via internal email and students were asked to complete the questionnaires on the Google Forms platform.

### Sample characteristics

A total of 350 students, including 263 women, 82 men, and five non-binary students, aged between 17 and 53 years ( $M = 22.84$ ,  $SD = 4.65$ ) participated in the study. Detailed socio-demographic characteristics of the sample are provided in Table 2.

### Materials

Sociodemographic variables were collected using a questionnaire. A series of self-report questionnaires, described in detail below, and three questions with a response scale from 1 to 10 were used to examine the psychological variables.

1. The Oldenburg Burnout Inventory (OLBI; Demerouti et al., 2003), in a Polish adaptation by Chirkowska-Smolak (2018), is a 16-item self-report questionnaire designed to assess two dimensions of job burnout: exhaustion and disengagement. The OLBI questionnaire was adapted by Mudło-Głagolska and Larionow (2023) into a version for students with the permission of Chirkowska-Smolak (2018). This version has shown good psychometric properties in Polish studies (Mudło-Głagolska and Larionow, 2023). The questionnaire contains 16 items, eight items each to measure each dimension of academic burnout: exhaustion (e.g., "During my studies, I often feel emotionally drained") and disengagement (e.g., "It happens more and more often that I talk about my studies in a negative way"). Each subscale comprises four negative and four positive items. The total score is calculated by summing the subscale scores (Sinval et al., 2019). Responses are given on a 4-point Likert scale from 1 (*strongly agree*) to 4 (*strongly disagree*).

2. The Passion Scale (PS; Marsh et al., 2013) in a Polish adaptation by Mudło-Głagolska et al. (2019) to measure the passion for studying is a 17-item self-report questionnaire of harmonious and obsessive passion for studying. The PS contains six items each for harmonious (e.g., “My studies are in harmony with the other activities in my life”) and obsessive passion (e.g., “My studies are so exciting that I sometimes lose control over them”), as well as five items measuring the criteria for passion (e.g., “I spend a lot of time doing my studies”). These statements refer to the time spent studying, whether the individual enjoys it, considers it important to them, describes it as their passion, and considers it a part of themselves. Responses are given on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The threshold for identifying the presence of passion is a mean score of 5 on the passion criteria.
3. The Patient Health Questionnaire-4 (PHQ-4; Kroenke et al., 2009), in a Polish adaptation by Mudło-Głagolska and Larionow (2023), is a four-item self-report screening questionnaire designed to measure symptoms of anxiety and depression. The PHQ-4 contains two subscales: anxiety (e.g., “Feeling nervous, anxious or on edge”) and depression (e.g., “Feeling down, depressed or hopeless”). The participants are asked to indicate the frequency with which they have experienced symptoms of anxiety and depression over the past two weeks on a 4-point Likert scale, from 0 (*not at all*) to 3 (*nearly every day*). A score of  $\geq 3$  on the anxiety and depression subscales is potentially indicative of an anxiety disorder or depression.
4. Giessen Subjective Complaints List-8 (GGB-8; Kliem et al., 2017) in a Polish adaptation by Larionow et al. (2022) is an 8-item self-report questionnaire measuring the eight most commonly rated somatic complaints in four categories: (1) exhaustion (e.g., “Being easily exhausted”), (2) gastrointestinal complaints (e.g., “Feeling bloated or distended”), (3) musculoskeletal complaints (e.g., “Backache”) and (4) cardiovascular complaints (e.g., “Palpitations or heart pounding”). Each category contains two items rated on a 5-point Likert scale from 0 (*not at all*) to 4 (*very much*).
5. The Subjective Vitality Scale (SVS; Ryan and Frederick, 1997) in a Polish adaptation by Mudło-Głagolska (2020) is a 5-item self-report questionnaire measuring trait vitality. It consists of five items referring to a sense of energy and vitality (e.g., “I feel alive and vital”). Answers are given on a 7-point Likert scale from 1 (*not true at all*) to 7 (*very true*).
6. The Rosenberg Self-Esteem Scale (SES; Rosenberg, 1965) in a Polish adaptation by Dzwonkowska et al. (2008) is a 10-item self-report questionnaire used to assess self-esteem (e.g., “On the whole, I am satisfied with myself”). Responses are given on a 4-point Likert scale from 1 (*strongly agree*) to 4 (*strongly disagree*).
7. The Perceived Stress Scale-4 (PSS-4; Cohen et al., 1983) in a Polish adaptation by Kleszczewska et al. (2018) is used to measure subjectively perceived stress experienced over the past month. The PSS-4 contains four statements (e.g.,

“In the last month, how often have you felt that you were unable to control the important things in your life?”) rated on a 5-point Likert scale from 0 (*never*) to 4 (*very often*).

8. The Brief Resilience Scale (BRS; Smith, 2008) in a Polish adaptation by Konaszewski et al. (2020) is a 6-item self-report questionnaire measuring trait resilience (e.g., “I tend to bounce back quickly after hard times”). Responses are given on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*).
9. The General Academic Self-Efficacy Scale (GASE; Nielsen et al., 2017) in a Polish translation by Pawlicka et al. is a four-item self-report questionnaire measuring academic efficacy (e.g., “I will remain calm in my exam because I know I will have the knowledge to solve the problems”). Responses are given on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*).
10. The Optimism-Pessimism Short Scale-2 (SOP2; Nießen et al., 2022) in a Polish translation by Mudło-Głagolska and Larionow is a two-item questionnaire for measuring optimism (e.g., “Optimists are people who look to the future with confidence and who mostly expect good things to happen. How would you describe yourself? How optimistic are you in general?”). Responses are given on a 7-point Likert scale from 1 (*not at all optimistic* or *not at all pessimistic*) to 7 (*very optimistic* or *very pessimistic*).

Subjective assessment of health was assessed with the question: “Please rate your health on a scale of 1 to 10, where 1 means ‘very bad’ and 10 means ‘very good’”.

The sense of satisfaction with the study program was assessed with the question: “Please rate on a scale of 1 to 10 how satisfied you are with your field of study, where 1 means ‘completely dissatisfied’ and 10 means ‘completely satisfied’”.

The sense of prestige of the study program was assessed with the question “Please rate on a scale of 1 to 10 how prestigious you consider your course of study to be, where 1 means ‘not at all prestigious’ and 10 means ‘very prestigious’”.

## Qualitative methodology

To gain a detailed understanding of the impact of various factors on university students’ wellbeing, we also included two open-ended questions. The impact of various factors on well-being was assessed with the question: “My well-being at university is negatively affected by (please list the 3 most important factors)”. In contrast, factors positively influencing wellbeing were assessed with the question: “My wellbeing at university is positively influenced by (please list the 3 most important factors)”.

## Statistical analysis

We conducted the statistical analyses using Statistica 13.3. Descriptive statistical analysis, including the calculation of skewness and kurtosis of the analysed variables, was used to ascertain whether the distribution of the variables deviated from



a normal distribution. Pearson's  $r$  correlations were used to examine the interrelationship between the analysed psychological variables and academic burnout. Student's independent samples  $t$ -test was used to compare the levels of these variables between men and women as well as between full-time and part-time students in the sample. Hierarchical regression was used to identify statistically significant predictors of academic burnout among the analysed psychological variables.

## Results

### Descriptive statistics

We analysed the skewness and kurtosis values for all the variables in the sample (Table 3). These values ranged from  $-2$  to  $2$ , indicating that the distribution was close to normal. Reliability (internal consistency) for all variables was satisfactory (Cronbach's alpha ranging from  $.71$  to  $.90$ ), except for obsessive passion (Cronbach's alpha =  $.62$ ), cardiovascular complaints (Cronbach's alpha =  $.65$ ) and gastrointestinal complaints (Cronbach's alpha =  $.69$ ), where it was slightly lower.

Students were rather satisfied with their field of study ( $M = 7.04$ ,  $SD = 2.13$ , on a scale of  $1-10$ ), while they rated the prestige of their field of study slightly lower ( $M = 6.15$ ,  $SD = 2.25$ , on a scale of  $1-10$ ).

Table 3. Descriptive statistics of the analysed variables ( $n = 350$ )

Variables	Cronbach's alpha	$M$	$SD$	Min.	Max.	Skewness	Kurtosis
GBB-8 Somatic symptoms (total score)	.78	13.91	6.60	0	32	.31	-.35
GBB-8 Exhaustion	.75	4.88	2.05	0	8	-.29	-.64
GBB-8 Gastrointestinal symptoms	.69	2.64	2.18	0	8	.59	-.45
GBB-8 Musculoskeletal symptoms	.78	3.98	2.45	0	8	-.03	-1.09
GBB-8 Cardiovascular symptoms	.65	2.41	2.23	0	8	.72	-.36
SES Self-esteem	.90	26.98	6.36	11	40	-.06	-.56
PSS-4 Stress	.78	7.46	3.32	0	16	-.04	-.37
SVS Vitality	.85	19.40	6.40	5	35	-.01	-.38
BRS Resilience	.87	2.95	.87	1	5	-.03	-.27

cont. tab. 3

Variables	Cronbach's alpha	M	SD	Min.	Max.	Skewness	Kurtosis
GASE General academic self-efficacy	.81	14.25	3.52	4	20	-1.03	1.09
PHQ-4 Anxiety and depression symptoms (total score)	.86	5.80	3.55	0	12	.24	-1.09
PHQ-4 Anxiety	.78	3.22	1.87	0	6	.09	-1.19
PHQ-4 Depression	.81	2.58	1.99	0	6	.32	-1.11
OLBI Academic burnout (total score)	.85	42.85	6.98	24	59	-.14	-.43
OLBI Exhaustion	.85	22.55	4.22	10	32	-.06	-.55
OLBI Disengagement	.71	20.30	3.79	10	32	-.05	-.26
PS Passion criteria	.85	4.69	1.21	1	7	-.71	.47
PS Harmonious passion	.87	4.76	1.18	1	7	-.55	.23
PS Obsessive passion	.62	2.83	.95	1	6	.47	-.04
SOP-2 Optimism	.88	4.04	1.54	1	7	-.19	-1.00
Sense of satisfaction with the study program	-	7.14	2.14	1	10	-.69	-.08
Sense of prestige of the study program	-	6.24	2.21	1	10	-.46	-.36
Subjective assessment of health	-	7.01	1.67	2	10	-.65	.18

Note. Higher scores indicate a higher degree of the construct.

Table 4 shows the Pearson's  $r$  correlation coefficients between the analysed psychological variables and academic burnout. The majority of the psychological variables were statistically significantly associated with academic burnout. Among the potential risk factors, exhaustion symptoms and anxiety-depression symptoms were the most strongly and positively associated with academic burnout. Conversely, among the potential protective factors, harmonious passion and the sense of satisfaction with the study program were negatively associated with academic burnout.

Table 4. Pearson's  $r$  correlation coefficients between the psychological variables and academic burnout ( $n = 350$ )

Variables	OLBI Academic burnout (total score)	OLBI Exhaustion	OLBI Disengagement
GBB-8 Somatic symptoms (total score)	.38***	.46***	.19***
GBB-8 Exhaustion	.53***	.60***	.30***
GBB-8 Gastrointestinal symptoms	.23***	.27***	.12*
GBB-8 Musculoskeletal symptoms	.15**	.21***	.05
GBB-8 Cardiovascular symptoms	.25***	.30***	.13*
SES Self-esteem	-.41***	-.40***	-.31***
PSS-4 Stress	.47***	.48***	.34***
SVS Vitality	-.50***	-.50***	-.36***
BRS Resilience	-.39***	-.47***	-.20***
GASE General academic self-efficacy	-.28***	-.25***	-.24***
PHQ-4 Anxiety and depression symptoms (total score)	.50***	.54***	.32***
PHQ-4 Anxiety	.43***	.48***	.27***
PHQ-4 Depression	.48***	.51***	.32***
PS Passion criteria	-.59***	-.38***	-.67***
PS Harmonious passion	-.69***	-.49***	-.72***
PS Obsessive passion	-.17**	.01	-.31***
SOP-2 Optimism	-.33***	-.35***	-.23***
Sense of satisfaction with the study program	-.54***	-.29***	-.67***
Sense of prestige of the study program	-.34***	-.13*	-.49***
Subjective health assessment	-.24***	-.21***	-.21***

Note. \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

## **Somatic health**

Based on the Polish norms for the GBB-8 (Larionow et al., 2022), we assessed the severity of somatic symptoms among students. One in four female students (24.33%) and one in seven male students (13.41%) were characterised by a high level of somatic symptoms (8–10 stens). Above-average scores (7 stens) were achieved by 16.72% of women and 18.30% of men. An average score (5–6 stens) was achieved by 31.54% of women and 46.36% of men. A below-average score (4 stens) was achieved by 12.92% of women and 15.86% of men. A low score (1–3 stens) was obtained by 14.45% of women and 6.10% of men. Nevertheless, students rated their health as good on average ( $M = 7.01$ ,  $SD = 1.67$ , on a scale of 1–10).

## **Mental health**

More than half (57.14%) of the students obtained a positive screening result ( $\geq 3$  points on the PHQ-4 anxiety subscale), indicating a potential anxiety disorder. This result was obtained by more women (58.18%) than men (51.23%) and by more full-time (58.06%) than part-time students (51.92%).

A screening score indicating the potential presence of depression ( $\geq 3$  points on the PHQ-4 depression subscale) was obtained by 45.43% of students. Also, this score was obtained by more women (47.54%) than men (36.60%) and more full-time (45.64%) than part-time (44.32%) students.

## **Passion for studying**

Almost half (47.71%) of the students reported passion for studying (mean score  $\geq 5$  points in the passion criteria). 52.09% of these students were female and 35.37% were male. Also, 47.32% were full-time students, while 50.00% were part-time studies. The majority of students with passion for studying were characterised by harmonious passion (95.81%).

## **Comparative analysis of psychological variables between men and women and between full-time and part-time students**

The Student's independent-samples  $t$ -test demonstrated that women exhibited a statistically significantly higher level of all somatic symptoms in comparison to men ( $p < .05$ ). Women were also characterised by statistically significantly higher levels of passion criteria, harmonious and obsessive passion, and sense of optimism than men ( $p < .05$ ). Gender did not statistically significantly differentiate the levels of other psychological variables ( $p > .05$ ). There were no statistically significant differences between full-time and part-time students in terms of all analysed psychological variables ( $p > .05$ ).

## Predictive role of analysed psychological factors in academic burnout

A hierarchical multiple regression analysis was used to ascertain the most significant predictors of academic burnout and its two dimensions, as shown in Table 5. In the first step, two variables were introduced into the regression model as predictors: harmonious passion and obsessive passion. In the second step, other psychological factors were added, including personal resources and potential risk factors for academic burnout.

All regression models demonstrated statistical significance ( $p < .001$ ) and explained between approximately 25% and 54% of the variance in the results of academic burnout and its two dimensions in the initial step. Harmonious passion was a strong predictor of low levels of academic burnout, while obsessive passion showed mixed results, being associated with higher levels of exhaustion and lower levels of disengagement.

In the second step, while controlling for obsessive passion and harmonious passion, the role of other psychological factors was assessed. Adding them to the regression models increased the explained variance in academic burnout scores and its two dimensions from 5.68% to 29.68% ( $\Delta R^2$  between the second and first steps). Harmonious passion remained a strong predictor of low academic burnout, while high levels of exhaustion (somatic symptom dimension) and anxiety symptoms were associated with academic burnout. Resilience showed a negative association with exhaustion and a positive association with disengagement, while obsessive passion showed negative associations with academic burnout.

Table 5. Results of hierarchical multiple regression in the prediction of academic burnout ( $n = 350$ )

Predictors	OLBI Academic burnout (overall score)	OLBI Exhaustion	OLBI Disengagement
First step (harmonic passion and obsessive passion as predictors)		Beta	
PS Harmonious passion	-.69***	-.52***	-.69***
PS Obsessive passion	.01	.14**	-.14***
Model parameters in the first step	$F(2, 347) = 154.02$ , $p < .001$ , $R^2 = 47.03\%$	$F(2, 347) = 59.270$ , $p < .001$ , $R^2 = 25.46\%$	$F(2, 347) = 203.95$ , $p < .001$ , $R^2 = 54.03\%$
Second step (all psychological factors as predictors)		Beta	

Predictors	OLBI Academic burnout (overall score)	OLBI Exhaustion	OLBI Disengagement
PS Harmonious passion	<b>-.52***</b>	<b>-.30***</b>	<b>-.62***</b>
PS Obsessive passion	<b>-0.12***</b>	-0.01	<b>-0.22***</b>
SES Self-esteem	.01	.05	-.05
GASE General academic self-efficacy	-.05	-.07	-.01
GBB-8 Exhaustion	<b>.30***</b>	<b>.37***</b>	<b>.14**</b>
GBB-8 Gastrointestinal symptoms	.06	.05	.05
GBB-8 Musculoskeletal symptoms	-.01	.01	-.03
GBB-8 Cardiovascular symptoms	.01	-.01	.04
PHQ-4 Anxiety	<b>.13*</b>	.09	<b>.13*</b>
PHQ-4 Depression	.00	.04	-.04
SOP-2 Optimism	.05	.03	.05
PSS-4 Stress	.08	.05	.10
SVS Vitality	-.03	-.08	.03
BRS Resilience	-.03	<b>-.13*</b>	<b>.10*</b>
Model parameters in the second step	$F(14, 335) = 47.087,$ $p < .001,$ $R^2 = 66.31\%$	$F(14, 335) = 29.407,$ $p < .001,$ $R^2 = 55.14\%$	$F(14, 335) = 35.462,$ $p < .001,$ $R^2 = 59.71\%$

Note. Statistically significant predictors are in bold. \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

### Analysis of open-ended questions

The analysis of the responses to the open-ended questions was based on grouping responses with similar themes. This allowed for describing categories and sub-categories of factors influencing students' wellbeing. The percentage of responses belonging to each category among the total number of factors mentioned was analysed separately for negative and positive factors, as not all students mentioned three factors in each open-ended question.

Table 6. Factors negatively affecting the well-being of the students

Categories	Subcategories	Examples of student responses	Recommendations
1. Work structure 25.65% of all responses (247 responses)	1.1. Reservations regarding the administrative and organisational operation of the university	"lack of organisation of the university", "problems in the provision of formal information by university staff", "lack of stable access to important information regarding the study plan and individual courses"	Establishment of procedures for the circulation of information between academic staff and the Student Affairs Office. Updating the necessary information on university portals, website or Facebook pages.
	1.2. Design of the course schedule	"ever-changing course schedule", "poorly arranged course schedule (classes 5 days a week, at widely varying hours)", "the schedule itself and/or way of arranging the schedule every six months"	Ensuring that the courses are evenly distributed throughout the week by minimising long breaks between classes.
	1.3. Long instructional days	"classes from 8.00 a.m. to 7.30 p.m.", "many hours spent at the university", "stretched schedule"	Even distribution of courses during the week to remedy the situation in which they are scheduled from morning to evening.
2. Lecturers 14.75% of all responses (142 responses)	2.1. Objections regarding the competence of lecturers and the manner in which classes are conducted	"sense of pointlessness of attending courses where lecturers merely reiterate books and do not contribute original content", "course organisation and management", "low involvement of academic staff"	Recognising and rewarding instructors who, in the opinion of the student community, are fulfilling their responsibilities in an exemplary manner.
	2.2. Sense of unfair assessment	"sense of unfairness related to grades and learning (sometimes during the examination period)", "bad/unfair treatment by lecturers", "not understanding courses despite greater independent effort"	Familiarising students with the criteria for marking term papers, examinations. Making it possible to review the grades from credit papers/examinations. Consultations with instructors in order to clarify how students are assessed and graded.

cont. tab. 6

Categories	Subcategories	Examples of student responses	Recommendations
3. Student responsibilities 14.12% of all responses (136 responses)	3.1. Overlapping examinations and tests	"many tests on one date", "sudden change of exam dates", "accumulation of exams"	Introduction of a limit on the number of tests/exams that can be taken in one day.
	3.2. Excessive homework	"too much homework instead of going over something in class", "amount of material to study independently", "amount of material to learn"	Presenting the course plan at the start of the class and subsequently implementing it in a methodical manner. Outlining how the tasks should be carried out.
	3.3. Necessity of presenting the results of one's work in class.	"stress related to public speaking and presenting", "in-class presentations", "public speaking".	Organising workshops on public speaking, related difficulties, and stress management strategies.
4. Personal difficulties: 10.49% of all responses (101 responses)		"my neurological disease", "pressure from family", "financial problems"	Increasing the availability of psychological support for students.
5. Stress: 8.52% of all responses (82 responses)		"studying-related stress", "project-related stress", "exam-related stress"	Increasing the availability of psychological counseling. Expanding the scope of psychological services at the university to include group activities for students and preventive mental health measures.
6. Relationships: 6.02% of all responses (58 responses)		"unpleasant atmosphere among the student group", "conflicts within the group", "loud conversations between students in class"	Supporting and promoting student council activities promoting the growth of academic community. Implementation of workshops on team building and conflict resolution by psychologists.



cont. tab. 6

Categories	Subcategories	Examples of student responses	Recommendations
7. Time management: 5.71% of all responses (55 responses)		<p>"lack of ability to organise time",            "lack of time for basic tasks like making food because classes last all day long + then the commute back home", "lack of time to pursue interests"</p>	Organising extracurricular workshops by psychologists on self- and time-management.
8. Working conditions: 5.61% of all responses (54 responses)		"cold classrooms", "lack of working hot drink vending machines", "no access to a canteen/microwave (hot meal during the day)"	Organising a designated area for students that offers a comfortable space for relaxation and having lunch.
9. Fatigue: 4.78% of all responses (46 responses)		"lack of sufficient sleep", "lack of time to rest and relax", "fatigue if there are a lot of lectures on the same day"	Organisation of extracurricular workshops by psychologists on sleep hygiene and relaxation.
10. New environment: 2.91% of all responses (28 responses)		<p>"homesick and missing family",            "missing high school friendships",            "not being able to return home (I am from Belarus)"</p>	Supporting and promoting student council activities promoting the growth of academic community and increasing the availability of psychological support for students.
11. Anxiety about the future: 1.45% of all responses (14 responses)		"the prospect of necessarily tying one's future to the completed studies", "worrying about the future", "uncertainty about the future after graduation"	Encouraging the use of the career office and engaging alumni to share their experiences after graduation.

Table 6 presents the categories and subcategories of factors negatively affecting students' well-being as well as corresponding examples of student responses. Based on this analysis, recommendations for interventions that could potentially reduce or eliminate factors negatively affecting student well-being were proposed.

Table 7 shows the categories of factors that positively influence students' well-being as well as corresponding examples of student responses.

Table 7. Factors positively influencing the well-being of the students

Categories	Examples of student responses
1. Relationships: 23.06% of all responses (217 responses)	"integration events with people from the study year", "meeting new people", "positive people"
2. Lecturers: 19.23% of all responses (181 responses)	"helpful and intelligent teachers", "good results of my work and positive feedback from the teacher", "understanding and committed teachers"
3. Knowledge: 17.96% of all responses (169 responses)	"interesting lecture and tutorial content", "knowledge on emotions acquired in the course and from other sources (on emotions, self-awareness, development, etc.)", "practical knowledge"
4. Working conditions: 15.52% of all responses (146 responses)	"nice places in the department to relax/learn", "good conditions - appropriate temperature", "purchase of snacks on site possible"
5. Attitude: 9.67% of all responses (91 responses)	"the study program is my passion", "passion for what I am learning about", "courses that interest and inspire me"
6. Good time management: 5.1% of all responses (48 responses)	"time for yourself after class", "regularity", "schedule that allows for other activities during the day"
7. Success: 4.25% of all responses (40 responses)	"scholarship", "receiving good grades", "appreciation by instructors"
8. Growth: 4.14% of all responses (39 responses)	"pursuing my own mission", "improving myself for a better future", "participating in additional activities (study clubs, volunteering)"
9. Nature: 1.06% of all responses (10 responses)	"sunny weather", "trees surrounding the building", "time outdoors"

## Discussion

The primary objective of the study was to identify the role of various psychological factors that either facilitate or protect against academic burnout. A screening assessment of mental and somatic health was conducted, and the role of study-related

resources and students' personal resources was analysed. The quantitative data was augmented by the findings of the qualitative analysis, which offered insight into the students' subjective, open-ended opinions regarding the factors that influence their well-being at university, both positively and negatively.

**Somatic health.** Almost a quarter of women and one in seven men were characterised by high levels of somatic symptoms. Similar results were found in a study on the frequency of somatic symptoms related to mental health, when an average of 26.3% of students reported experiencing such symptoms (Sperling et al., 2023). Somatic symptoms can be a predictor of mental health problems (depression and anxiety), indicating the need for screening for both somatic and mental health (Simić-Vukomanović, 2018).

**Mental health.** More than half of the students screened positive for anxiety disorders, while almost half screened positive for depression. These results were found to be much higher than those presented in a meta-analysis of 64 studies, which found that the average prevalence of depression and anxiety symptoms in students was 33.6% and 39.0%, respectively (Li et al., 2022). However, when comparing the results with the average frequency of anxiety and depression symptoms among Polish people in 2023 (Larionow, 2023), students were characterised by a slightly lower severity of these symptoms compared to the general population.

**Passion for studying.** In the current study, almost half of the students indicated having passion for their study. Similar results, 42.21% (Larionow and Gabryś, 2024) and 56.2% (Zinczuk-Zielazna, 2021), were noted in the studies conducted at other Polish universities. The qualitative analysis showed that students value lecturers sharing their passion with them, the opportunity to develop their passions by participating in study clubs or other activities offered by the university, as well as time to develop passions unrelated to studying. This can become the basis for shaping passion in less engaged students as well.

**Predictive role of psychological variables for academic burnout.** Given the considerable statistical significance of the association between psychological factors and academic burnout, a regression analysis was conducted to ascertain the extent to which individual risk and protective factors contribute to the development of academic burnout. The objective was to identify the most significant predictors among the psychological factors analysed in the current study to create a model for the most compact yet effective framework of psychological support for students experiencing high levels of academic burnout.

A wide range of psychological factors were identified as potentially associated with academic burnout. Among these, harmonious passion was found to contribute to lower levels of academic burnout. Conversely, exhaustion, as a dimension of somatic symptoms, as well as anxiety symptoms, were associated with higher levels of academic burnout. The study found that factors such as self-esteem, sense of academic efficacy, optimism, vitality, as well as stress and other somatic symptoms were not statistically significant predictors of academic burnout. This indicates that risk factors

and protective factors contribute differently to academic burnout. In turn, psychological support for students and the prevention of academic burnout can be directed towards the reinforcement of protective factors, particularly harmonious passion, and the mitigation of risk factors, particularly symptoms of exhaustion and anxiety.

**Qualitative factors.** The issue that students identified as problematic was primarily the difficulty they encountered with the structure of the university and its administrative operations. Another important factor for students' well-being was the teaching staff, especially their academic competence and commitment to their work. Students highlighted this both in terms of factors affecting them positively and negatively. Students seek from teaching staff a sense of support, appreciation of their work, and the opportunity to receive practical guidance for development, among others. Similarly, fellow students were also a significant factor, reinforcing the necessity of fostering and sustaining an academic community. The students identified the importance of belonging to a group with similar aims, a willingness to help, mutual support, and a professional and knowledge-sharing environment as key factors.

**Practical implications.** The findings of the study demonstrate that the mode of study (full-time vs. part-time) did not differentiate the levels of the analysed psychological factors. This suggests that potential measures to improve university student wellbeing may be universally applicable. Harmonious passion for studying appears to be the most significant psychological factor explaining the high variance in academic burnout scores, suggesting that shaping harmonious passion for studying may be an important component of educational and preventive measures at universities. It would be advantageous to implement health-promoting educational initiatives for students to mitigate the prevalence of somatic and anxiety symptoms. This could be achieved by devising and implementing brief training programmes or academic classes in this domain, and conducting repeated symptom screening to monitor students' mental health and their needs. It is imperative that information regarding psychological support for students be made more widely available.

## Conclusions

1. There should be greater focus on the mental and physical wellbeing of university students. This could be achieved by introducing regular screening assessments and implementing a comprehensive prevention programme. Additionally, availability of workshops addressing reported problems and difficulties should be increased, thus enhancing the provision of psychological support at the university level.
2. The most important protective factor against academic burnout appeared to be harmonious passion for studying. Thus, the focus of psychoeducational activities for students should be on facilitating harmonious passion development.
3. Given the lack of substantial discrepancies between the results observed in women and men and the absence of differentiation between full-time and part-

time students with regard to these factors, it appears that the implemented preventive measures may be applicable across all academic disciplines.

4. According to students, the most common factor negatively affecting their well-being was the organisational and administrative difficulties of the university. Conversely, a favourable aspect for students was the quality of their interpersonal relationships and the commitment of their instructors to the learning process. It is therefore advisable to provide support for the development and growth of the academic community.

## Bibliography

- Bakker, A.B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328, doi: 10.1108/02683940710733115
- Bolatov, A.K., Seisembekov, T.Z., Smailova, D.S., & Hosseini, H. (2022). Burnout syndrome among medical students in Kazakhstan. *BMC Psychology*, 10(1), doi: 10.1186/s40359-022-00901-w
- Bumbacco, C., & Scharfe, E. (2023). Why Attachment Matters: First-Year Post-secondary Students' Experience of Burnout, Disengagement, and Drop-Out. *Journal of College Student Retention: Research, Theory and Practice*, 24(4), 988–1001, doi: 10.1177/1521025120961012
- Çam, Z., & Öğülmüş, S. (2019). From Work Life to School: Theoretical Approaches for School Burnout. *Psikiyatride Güncel Yaklaşımlar*, 11(1), 80–99, doi: 10.18863/pgy.392556
- Cheng, J., Zhao, Y.Y., Wang, J., & Sun, Y.H. (2020). Academic burnout and depression of Chinese medical students in the pre-clinical years: The buffering hypothesis of resilience and social support. *Psychology, Health and Medicine*, 25(9), 1094–1105, doi: 10.1080/13548506.2019.1709651
- Chirkowska-Smolak, T. (2018). Polska adaptacja kwestionariusza do pomiaru wypalenia zawodowego OLBI (The Oldenburg Burnout Inventory). *Studia Oeconomica Posnaniensia*, 6(3), 27–47, doi: 10.18559/SOEP.2018.3.2
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396.
- Demerouti, E., Bakker, A., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. *European Journal of Psychological Assessment*, 18, 296–307, doi: 10.1027/1015-5759.19.1.12
- Doo, M.Y., & Bonk, C.J. (2020). The effects of self-efficacy, self-regulation and social presence on learning engagement in a large university class using flipped Learning. *Journal of Computer Assisted Learning*, 36(6), 997–1010, doi: 10.1111/jcal.12455
- Dzwonkowska, I., Lachowicz-Tabaczek, K., & Łaguna, M. (2008). *Samoocena i jej pomiar. Polska adaptacja Skali SES M. Rosenberga*. Pracownia Testów Psychologicznych Polskiego Towarzystwa Psychologicznego.

- Fariborz, N., Hadi, J., & Nia Ali, T. (2019). Students' academic stress, stress response and academic burnout: Mediating role of self-efficacy. *Social Sciences and Humanities, 27*(4), 2441–2454.
- Hammarström, P., Rosendahl, S., Gruber, M., & Nordin, S. (2023). Somatic symptoms in burnout in a general adult population. *Journal of Psychosomatic Research, 168*, 111217, doi: 10.1016/j.jpsychores.2023.111217
- Jagodics, B., Nagy, K., Szénási, S., Varga, R., & Szabó, É. (2023). School Demands and Resources as Predictors of Student Burnout Among High School Students. *School Mental Health, 15*(1), 90–104. doi: 10.1007/s12310-022-09534-1
- Jagodics, B., & Szabó, É. (2023). Student Burnout in Higher Education: A Demand-Resource Model Approach. *Trends in Psychology, 31*(4), 757–776. doi: 10.1007/s43076-021-00137-4
- Kleszczewska, D., Mazur, J., Dzielska, A., Michalska, A., Gaspar de Matos, M., Santos, T., Gaspar, T., Branquinho, C., Inês Antão, M., & Guedes, F. (2018). *Improve the Youth. Zdrowie psychiczne młodzieży. Raport z badań*. Fundacja Instytutu Matki i Dziecka.
- Kliem, S., Lohmann, A., Klatt, T., Mößle, T., Rehbein, ..., & Brähler, E. (2017). Brief Assessment of Subjective Health Complaints: Development, Validation and Population Norms of a Brief Form of the Giessen Subjective Complaints List (GGB-8). *Journal of Psychosomatic Research, 95*, 33–43, doi: 10.1016/j.jpsychores.2017.02.003
- Konaszewski, K., Niesiołędzka, M., & Surzykiewicz, J. (2020). Validation of the Polish version of the Brief Resilience Scale (BRS). *PLOS ONE, 15*(8), e0237038, doi: 10.1371/journal.pone.0237038
- Kordzanganeh, Z., Bakhtiarpour, S., Hafezi, F., & Dashtbozorgi, Z. (2021). The relationship between time management and academic burnout with the mediating role of test anxiety and self-efficacy beliefs among university students. *Journal of Medical Education, 20*(1), e112142, doi: 10.5812/jme.112142
- Kroenke, K., Spitzer, R.L., Williams, J.B., & Löwe, B. (2009). An ultra-brief screening scale for anxiety and depression: the PHQ4. *Psychosomatics, 50*(6), 613–621, doi: 10.1176/appi.psy.50.6.613
- Larionow, P. (2023). Anxiety and depression screening among Polish adults in 2023: Depression levels are higher than in cancer patients. *Psychiatria, 20*(4), 143-151. doi: 10.5603/psych.97199
- Larionow, P., & Gabryś, A. (2024). Psychological Characteristics of Students with Passion for Studying. *Behavioral Sciences, 14*(6), 453, doi: 10.3390/bs14060453
- Larionow, P., & Mudło-Głagolska, K. (2023). The Patient Health Questionnaire–4: Factor Structure, Measurement Invariance, Latent Profile Analysis of Anxiety and Depressive Symptoms and Screening Results in Polish Adults. *Advances in Cognitive Psychology, 19*(2), 123–137, doi: 10.5709/acp-0391-2
- Larionow, P., Mudło-Głagolska, K., & Michalak, M. (2022). Towards Psychosomatic Medicine: Psychometric Properties of the Polish Version of the Giessen Subjective Complaints List (GGB-8) and the Prevalence of Somatic Symptoms in

- a Polish Community Sample. *Annales Universitatis Mariae Curie-Skłodowska. Sectio J, Paedagogia-Psychologia*, 35(4), 117–138, doi: 10.17951/j.2022.35.4.117-138
- Li, W., Zhao, Z., Chen, D., Peng, Y., & Lu, Z. (2022). Prevalence and associated factors of depression and anxiety symptoms among college students: A systematic review and meta-analysis. *Journal of Child Psychology and Psychiatry*, 63(11), 1222–1230, doi: 0.1111/jcpp.13606
- Marsh, H.W., Vallerand, R.J., Lafrenière, M.-A.K., Parker, P., Morin, A.J.S., Carbonneau, N., Jowett, S., Bureau, J.S., Fernet, C., Guay, F., Salah Abduljabbar, A., & Paquet, Y. (2013). Passion: Does one scale fit all? Construct validity of two-factor passion scale and psychometric invariance over different activities and languages. *Psychological Assessment*, 25(3), 796–809, doi: 10.1037/a0032573
- Moksnes, U.K., & Reidunsdatter, R.J. (2019). Self-esteem and mental health in adolescents – level and stability during a school year. *Norsk Epidemiologi*, 28(1–2), doi: 10.5324/nje.v28i1-2.3052
- Mudło-Głagolska, K. (2020). Polska adaptacja narzędzia do badania subiektywnej witalności w ujęciu Ryana i Frederick. *Studia Psychologica: Theoria et praxis*, 20(1), 21–40, doi: 10.21697/sp.2020.20.1.02
- Mudło-Głagolska, K., & Larionow, P. (2023). The role of study passion in the subjective vitality, academic burnout and stress: The person-oriented approach and latent profile analysis of study passion groups. *Colloquium*, 15(1), 85–104, doi: 10.34813/06coll2023
- Mudło-Głagolska, K., Lewandowska, M., & Kasprzak, E. (2019). Adaptacja i walidacja narzędzia do badania pasji harmonijnej i pasji obsesyjnej: Passion Scale Marsha i współpracowników. *Przegląd Psychologiczny*, 62(1), 59–75.
- Mun, M., & Kim, M. (2022). Effect of academic burnout on self-esteem in nursing students: Mediating role of resilience. *Medico-Legal Update*, 22(2), 93–103, doi: 10.37506/mlu.v22i2.3236
- Nielsen, T., Dammeyer, J., Vang, M.L., & Makransky, G. (2018). Gender fairness in self-efficacy? A Rasch-based validity study of the General Academic Self-efficacy scale (GASE). *Scandinavian Journal of Educational Research*, 62(5), 664–681, doi: 10.1080/00313831.2017.1306796
- Nießen, D., Groskurth, K., Kemper, C.J., Rammstedt, B., & Lechner, C.M. (2022). The Optimism–Pessimism Short Scale–2 (SOP2): A comprehensive validation of the English-language adaptation. *Measurement Instruments for the Social Sciences*, 4(1), 1–14, doi: 10.1186/s42409-021-00027-6
- Oloidi, F.J., Sewagegn, A.A., Amanambu, O.V., Umeano, B.C., & Ilechukwu, L.C. (2022). Academic burnout among undergraduate history students. *Medicine*, 101(7), e28886, doi: 10.1097/md.00000000000028886
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.
- Ryan, R.M., & Frederick, C. (1997). On energy, personality, and health: subjective vitality as a dynamic reflection of well-being. *Journal of Personality*, 65, 529–565, doi: 10.1111/j.1467-6494.1997.tb00326.x

- Rzecznik Praw Pacjenta. (2020). *Zdrowie psychiczne na polskich uczelniach*. Downloaded 21 February 2023 from: <https://www.gov.pl/web/rpp/zdrowie-psychiczne-na-polskich-uczelniach---raport-rzecznika-praw-pacjenta>
- Safarzaie, H., Nastiezaie, N., & Jenaabadi, H. (2017). The relationship of academic burnout and academic stress with academic self-efficacy among graduate students. *The New Educational Review*, 49(3), 65–76, doi: 10.15804/tner.2017.49.3.05
- Salmela-Aro, K., & Upadyaya, K. (2014). Developmental trajectories of school burnout: Evidence from two longitudinal studies. *Learning and Individual Differences*, 36, 60–68, doi: 10.1016/j.lindif.2014.10.016
- Schaufeli, W.B., & Bakker, A.B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315, doi: 10.1002/job.248
- Shah, D.T., Williams, V.N., Thorndyke, L.E., Marsh, E.E., Sonnino, R.E., Block, S.M., & Viggiano, T.R. (2018). Restoring faculty vitality in academic medicine when burnout threatens. *Academic Medicine*, 93(7), 979–984, doi: 10.1097/acm.0000000000002013
- Simić, V.I., Mihajlović, G., Milovanović, D., Kocić, S., Radević, S., Đukić, S., Vuromanovic, V., & Đukić, D.S. (2018). The impact of somatic symptoms on depressive and anxiety symptoms among university students in central Serbia. *Vojnosanitetski Pregled*, 75(6), 582–588, doi: 10.2298/VSP160617368S
- Sinval, J., Queirós, C., Pasian, S., & Marôco, J. (2019). Transcultural adaptation of the Oldenburg burnout inventory (OLBI) for Brazil and Portugal. *Frontiers in Psychology*, 10, 338, doi: 10.3389/fpsyg.2019.00338
- Smith, B.W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15, 194–200, doi: 10.1080/10705500802222972
- Sperling, E.L., Hulett, J.M., Sherwin, L.B., Thompson, S., & Bettencourt, B.A. (2023). Prevalence, characteristics and measurement of somatic symptoms related to mental health in medical students: A scoping review. *Annals of Medicine*, 55(2), 2242781, doi: 10.1080/07853890.2023.2242781
- Stoeber, J., Childs, J.H., Hayward, J.A., & Feast, A.R. (2011). Passion and motivation for studying: Predicting academic engagement and burnout in university students. *Educational Psychology*, 31(4), 513–528, doi: 10.1080/01443410.2011.570251
- Trigueros, R., Padilla, A., Aguilar-Parra, J.M., Mercader, I., López-Liria, R., & Rocamora, P. (2020). The influence of transformational teacher leadership on academic motivation and resilience, burnout and academic performance. *International Journal of Environmental Research and Public Health*, 17(20), 7687, doi: 10.3390/ijerph17207687
- Tuckwiller, B., & Dardick, W.R. (2018). Mindset, grit, optimism, pessimism and life satisfaction in university students with and without anxiety and/or depression. *Journal of Interdisciplinary Studies in Education*, 6(2), 32–48.
- Zinczuk-Zielazna, J. (2021). *Paśja studiowania a samoregulacja, emocje i jakość relacji akademickich*. Wydawnictwo Rys.



# CZynniki RYZYKA I Czynniki Chroniące PRZED Wypaleniem Akademickim: W POSZUKIWANIU SKUTECZNEJ POMOCY PSYCHOLOGICZNEJ DLA STUDENTÓW

## Abstrakt.

**Wstęp:** Studenci coraz częściej mierzą się z problemami natury psychicznej, a także doświadczają wypalenia akademickiego. W celu zaprojektowania skutecznej pomocy psychologicznej dla studentów niezbędne jest określenie czynników ryzyka (np. objawów zdrowotnych) i czynników chroniących (np. zasobów osobistych i związanych ze studiowaniem) przed wypaleniem akademickim. Celem badania było określenie roli wybranych czynników psychologicznych, w tym czynników ryzyka i czynników ochronnych, w wypaleniu akademickim.

**Materiał i metody:** W badaniu wzięło udział 350 studentów Uniwersytetu Kazimierza Wielkiego w Bydgoszczy, w tym 263 kobiety, 82 mężczyzn i 5 osób niebinarnych, w wieku od 17 do 53 lat ( $M = 22,84$ ,  $SD = 4,65$ ). Wykorzystując kwestionariusze samoopisowe u studentów zbadano ich zasoby psychologiczne (np. witalność, pasję do studiowania) i objawy zdrowotne (np. symptomy somatyczne). Za pomocą analizy regresji określono najbardziej istotne czynniki psychologiczne związane z wypaleniem akademickim. Przy użyciu pytań jakościowych przeanalizowano czynniki, które wpływają pozytywnie i negatywnie na subiektywne samopoczucie studentów na studiach.

**Wyniki:** Odnotowano wysokie rozpowszechnienie dodatnich przesiewowych wyników w zakresie symptomów lęku (57,14%) i depresji (45,43%). Prawie wszystkie analizowane czynniki ryzyka, w tym dolegliwości somatyczne, stres, symptomy depresji i lęku, były związane z wyższym poziomem wypalenia akademickiego. Z kolei czynniki chroniące przed wypaleniem, w tym witalność, odporność psychiczna (rezyliencja), poczucie skuteczności akademickiej, a także pasja harmonijna do studiowania, były związane z niższym poziomem wypalenia akademickiego. Analiza regresji wykazała, że pasja harmonijna do studiowania była najbardziej istotnym predyktorem niskiego poziomu wypalenia akademickiego.

**Wnioski:** Zaprezentowane wyniki badania podkreślają największe znaczenie pasji harmonijnej dla zapobiegania wypalenia akademickiego, a także wskazują na niezbędność prowadzenia cyklicznych badań (przesiewowych) w zakresie zdrowia psychicznego i somatycznego, co wydaje się ważne w celu tworzenia skutecznych sposobów zapobiegania wypalenia akademickiego u studentów.

**Słowa kluczowe:** analiza przesiewowa, czynniki psychologiczne, pasja do studiowania, studenci, studia, symptomy somatyczne, wsparcie psychologiczne, wypalenie akademickie, zasoby osobiste, zdrowie psychiczne

Receipt date: 11<sup>th</sup> March 2024

Receipt date after correction: 15<sup>th</sup> May 2024

Print Acceptance Date: 28<sup>th</sup> May 2024