HEALTH PSYCHOLOGY REPORT · 2026
ORIGINAL ARTICLE

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Academic burnout and the psychological well-being of psychology students: the mediating role of stress coping strategies

BACKGROUND
Academic burnout poses a serious challenge for today's students, reducing their psychological well-being and increasing the risk of adjustment problems. Research indicates that stress coping strategies can play both protective and potentially harmful roles in this process. The aim of this study was to analyse the relationship between academic burnout and students' psychological well-being, with particular emphasis on the role of coping strategies.

PARTICIPANTS AND PROCEDURE
The study involved 371 Polish psychology students who completed standardised questionnaires measuring academic burnout (OLBI-S), psychological well-being (C. Ryff scale) and stress coping strategies (Mini-COPE). The age of the respondents ranged from 18 to 28 years. The study was conducted between April and May 2025 by reaching out to respondents directly.

RESULTS
The results confirmed that higher levels of burnout were significantly associated with lower psychological well-being. Problem-focused coping strategies promoted higher well-being and mitigated the negative impact of burnout, while avoidance strategies exacerbated the effect. Notably, emotion-focused strategies did not show significant associations with the studied variables, which may indicate their limited role in the context of academic demands.

CONCLUSIONS
Academic burnout poses a significant threat to students' well-being, and the long-term consequences are likely to persist in their professional lives. Developing adaptive coping strategies and limiting escape strategies can have a protective effect, supporting mental health and preparing students for future professional life.

KEY WORDS
coping; stress; well-being; academic burnout

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AUTHORS' CONTRIBUTIONS – A: Study design · B: Data collection · C: Statistical analysis · D: Data interpretation · E: Manuscript preparation · F: Literature search · G: Funds collection

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TO CITE THIS ARTICLE – Peplińska, A., Ulenberg, I., Tyl, M., & Przerwa, M. (2026). Academic burnout and the psychological well-being of psychology students: the mediating role of stress coping strategies. *Health Psychology Report.* https://doi.org/10.5114/hpr/218107

RECEIVED 25.09.2025 · REVIEWED 09.01.2026 · ACCEPTED 13.02.2026 · ONLINE PUBLICATION 30.04.2026

BACKGROUND

The term "psychological well-being" can be interpreted from two perspectives. The hedonistic approach emphasises the feeling of pleasure, positive emotions and the absence of suffering, i.e. subjective happiness. Conversely, the eudaimonistic approach emphasises a sense of meaning in life, self-fulfilment, acting in accordance with values and developing one's own potential (Ryan & Deci, 2001). Nowadays, the latter perspective is emphasised in particular: mental health is not only the absence of negative emotions, but above all the presence of purpose in life, deep values and personal development. Carol Ryff (1989) proposed a multidimensional model of well-being that includes self-acceptance, positive relationships, autonomy, mastery of one's environment, purpose in life, and personal growth. According to that model, high well-being is a resource that protects against the negative effects of stress – particularly important in demanding fields (e.g. psychology, medicine), where a strong sense of meaning and satisfaction from one's activities can serve as a protective shield against burnout. However, the last decade has seen a decline in the subjective satisfaction with life in many countries and an increase in psychosomatic complaints and emotional problems among young people. An analysis of PISA (Programme for International Student Assessment) data from 46 countries showed that between 2015 and 2018, the average level of life satisfaction declined in 39 countries, with girls being more affected by the decline; at the same time, the percentage of students reporting low satisfaction increased (Marquez & Long, 2021). HBSC (Health Behaviour in School-aged Children) studies in 36 countries showed a systematic increase in the frequency of subjective complaints (e.g., headaches, tension, difficulty sleeping) between 2002 and 2018, partly linked to increased school pressure (Cosma et al., 2020). More recent multinational analyses confirm the ongoing trend of increasing psychological and somatic complaints among adolescents through the 2010s and into the 2020s (Schrijvers et al., 2024). The mental health of young people is also significantly affected by situational factors, such as sudden social crises (armed conflicts, inflation, unemployment) or health crises. A striking example of this was the COVID-19 pandemic, which severely disrupted ordinary life worldwide. A survey conducted among Polish students at the peak of the pandemic (Guszkowska & Bodasińska, 2023) showed that as many as one-third of them felt intense fear of being infected with coronavirus. This was accompanied by anxiety about the future, related to uncertainty about further education, career and the health of loved ones. Significantly, this fear was not distributed evenly: women experienced it significantly more intensely than men, and medical students were more concerned about COVID than their peers from other specialisations. For example, it was observed that female medical students showed a higher level of fear of infection than female students in fields related to physical activity. The greater the anxiety about the future felt by students, the lower was their sense of psychological well-being during the study period. In other words, uncertainty and catastrophic visions of tomorrow undermined their well-being more than the fear of falling ill "here and now". The pandemic has shown that sudden global events have the potential to drastically increase stress levels among young people, which in turn can lead to a wave of burnout and mental health issues if no countermeasures are taken.

Students' psychological well-being is a key element of their academic and personal functioning. A high level of well-being means that a young person feels fulfilled, has a positive attitude towards themselves and their life, realises their potential and maintains satisfying social relationships. This state promotes resilience to stress and crises, while a decline in well-being is often associated with mental health problems, including academic burnout.

Academic burnout is a specific syndrome of chronic educational stress, analogous to professional burnout. It is characterised by three main dimensions: exhaustion (physical and emotional fatigue from studying), cynicism (distance, negative attitude towards classes and studies) and reduced sense of efficacy (feeling of lack of achievement and competence). Research confirms that the intense pressures associated with studying can cause a burnout syndrome analogous to that found in the working population (Demerouti & Bakker, 2008; Maslach et al., 1997; Schaufeli et al., 2002).

SYMPTOMS AND CONSEQUENCES OF ACADEMIC BURNOUT

Student burnout manifests as chronic fatigue, emotional detachment from academic responsibilities, and a loss of commitment to learning. Students experiencing burnout feel exhausted, lose their former enthusiasm for classes, become cynical or indifferent, and evaluate their own achievements as insufficient or worthless. Although this phenomenon was originally described in occupational settings, it is increasingly observed among university students. The longer the period of study, the more the effects of academic stress accumulate. For example, a study conducted in Spain showed that the percentage of medical students at risk of burnout increased from about 15% in the third year to over 37% in the sixth year of study (Galán et al., 2011).

Severe academic burnout has serious consequences. These include a decline in academic performance,

difficulty concentrating and learning, and an increased risk of dropping out. Notably, the effects of burnout can extend beyond the period of education – a long-term study by Robins et al. (2017) showed that students with high levels of burnout were more likely to experience occupational burnout after starting a job. In other words, symptoms of burnout experienced during university can predict future burnout in young people's professional lives. This makes the problem particularly worrying: not only does it hinder current education, but it can also affect graduates' future careers and mental health.

BURNOUT IN RELATION TO PSYCHOLOGICAL WELL-BEING

Studies consistently show a strong negative correlation between academic burnout and students' psychological well-being. The higher the level of burnout (exhaustion and cynicism), the lower the level of well-being; and conversely, people who enjoy high levels of well-being are less likely to suffer from burnout. For example, Morgan et al. (2020) observed in medical students that positive mental health (defined as a combination of emotional, social and functional well-being) correlates negatively with the level of burnout: students with better psychological well-being showed fewer symptoms of exhaustion and cynicism. Similarly, Drăghici and Cazan (2022) reported that the severity of academic burnout is associated with poorer overall adaptation to student life – which can be considered an indirect indicator of reduced well-being. This relationship is particularly evident during critical periods of study. In the early years (when young people are just learning to function in a new environment), a decline in well-being quickly results in burnout. Those who manage to maintain high levels of mental energy and engagement show greater resilience to academic stress. Sometimes a vicious circle is created – stress and overload reduce well-being, and a poor mental condition makes it difficult to cope with demands, which exacerbates burnout.

THE RELATIONSHIP BETWEEN STRESS COPING STRATEGIES, WELL-BEING AND ACADEMIC BURNOUT

Research indicates that stress coping strategies have a significant impact on the psychological well-being and academic burnout of students (Nguyen et al., 2016), including psychology students. The way students cope with stress can protect them from its negative effects or, conversely, contribute to increased burnout and reduced well-being (Moreta-Herrera et al., 2023).

Active coping strategies, such as planning, seeking solutions, or organising activities to reduce the impact of stressors, are associated with better psychological well-being and a lower risk of academic burnout. Students who employ active strategies effectively manage stress related to academic demands and feel more in control of their situation, which in turn reduces the risk of burnout. An active approach allows them to cope effectively with difficulties, which promotes their well-being and prevents burnout (Bakker et al., 2014; Leszczyńska & Peplińska, 2023). Active coping also allows for better work organisation and stress management, which in the long term translates into better academic performance (Guszkowska et al., 2016). Problem-focused coping (strategies focused on solving the problem) also correlates with lower burnout and lower levels of aggression (Spaan et al., 2024), which in itself may translate into better coping with academic pressure.

Social support is one of the most effective mechanisms for coping with stress. Research confirms that a high level of social support allows students to cope better with stress McLean et al. (2023) found that students with higher social support reported significantly lower levels of perceived stress. Social support acts as a buffer against stress, which can improve an individual's mental state and increase their self-esteem. Social support also provides university students with a sense of security and competence (Chen et al., 2023). As a result, comprehensive social support reduces stress and enables better management of emotions related to academic demands, which translates into a higher level of well-being.

Avoidance strategies, such as procrastination, ignoring problems, or avoiding confrontation with stress, can lead to negative consequences for well-being and constitute a risk factor for academic burnout. Students who employ avoidance strategies do not solve problems directly, which can lead to increasing stress and feelings of helplessness. Instead of reducing stress, avoidance often exacerbates it, leading to frustration, anxiety, and decreased motivation (Schaufeli & Bakker, 2004). Moreover, this phenomenon may be linked to the so-called Dunning–Kruger effect: students who underestimate or overestimate their competences are particularly prone to erroneous learning strategies, which lowers their well-being even further (Knof et al., 2024).

Emotional coping, which includes strategies such as positive reinterpretation of situations or seeking relief in humour, can help students reduce the emotional impact of stress. Research indicates that emotional coping strategies that help reduce emotional tension tend to improve well-being in the short term (Kabat-Zinn, 2003). However, over-reliance on emotional coping can lead to academic burnout, especially in situations where there is no viable solution to the problem. Strategies such as escaping into

entertainment or minimising the problem may help with short-term stress management, but they do not lead to a lasting solution to the difficulty. In the long term, a lack of effective coping with academic and emotional difficulties can lead to emotional exhaustion, which is a key component of burnout (Carrard, 2024). To summarise, the research review confirms that adaptive and social coping strategies (active action and support from the environment) have a positive impact on students' psychological well-being and protect against academic burnout. On the other hand, avoidance and resorting solely to temporary emotional methods are associated with a deterioration in well-being and an increased risk of burnout. In light of these findings, supporting students in building active coping skills and providing them with a strong social support network appear to be crucial for their mental health.

Academic burnout has become an increasingly prevalent concern among students in helping professions, including psychology, who are exposed to elevated levels of emotional and cognitive demands already during their training. Despite the growing body of empirical research on student burnout and psychological well-being, comparatively limited attention has been devoted to the underlying mechanisms that explain the associations between these constructs. The present study addressed this gap by examining the mediating role of coping strategies in the relationship between academic burnout and psychological well-being among psychology students.

CURRENT STUDY

The aim of this study was to investigate the relationship between academic burnout and students' psychological well-being, while taking into account mediating variables in the form of stress coping strategies. The following research questions were addressed: Is there a relationship between academic burnout among psychology students and their level of psychological well-being? Are academic burnout and stress coping strategies a significant predictor of psychological well-being among the group of students studied? Are stress coping strategies a significant mediating variable in the relationship between academic burnout and the psychological well-being of psychology students? In addition, the question of whether the year of study and the fact of students' professional activity are significant moderators of the examined relationships was explored. Based on a review of the literature and studies cited in the introduction to this article, the following research hypotheses were formulated:

H1a: There is a negative correlation between academic burnout and the level of psychological well-being among psychology students.

H1b: Problem-focused stress coping strategies are negatively correlated with academic burnout and positively correlated with psychological well-being.

H1c: Emotion-focused and avoidance stress coping strategies are positively correlated with academic burnout and negatively correlated with psychological well-being.

H2a: Academic burnout is a significant predictor of psychological well-being, affecting it negatively.

H2b: Problem-focused coping strategies are a significant predictor of psychological well-being, affecting it positively, while emotion-focused and avoidance strategies affect it negatively.

H3: Stress coping strategies are an important mediating variable in the relationship between academic burnout and the psychological well-being of psychology students – with problem-focused strategies reducing this relationship, and emotion-focused and avoidance strategies increasing it.

H4: Both the university year and the professional status of students are important moderators of the relationships studied.

PARTICIPANTS AND PROCEDURE

PARTICIPANTS

The study group was made up of 371 psychology students, mainly from the University of Gdańsk, attending full-time master's degree programmes. The age of the respondents ranged from 18 to 28 years (M = 22.3, SD = 2.4). The majority of the respondents were women (78.2%). In terms of year of study, the sample was evenly distributed: 98 students were first-year students (26.4% of the total), followed by 66 second-year students (17.8% of the total), 76 third-year students (20.5% of the total), 60 were in their fourth year (16.2% of the total), and 71 (19.1% of the total) were fifth-year students. In addition, 53.1% of the participants combined their studies with work.

MEASURES

Three measurement tools were used to verify the hypotheses:

Oldenburg Burnout Inventory for Students (OLBI-S) by Demerouti and Baker (2008), in a Polish adaptation prepared by Chirkowska-Smolak (2018). The tool consists of 16 items and two subscales – exhaustion and lack of engagement – measuring the level of fatigue with studies and indifference towards academic classes. The reliability index values in the study were as follows: for exhaustion, Cronbach's α = .83; for lack of engagement, Cronbach α = .77.

The Ryff Psychological Well-Being Scale (originally *Psychological Well-Being Scales*), developed by Ryff

(1989), in a shortened 18-item version based on a model of six dimensions: self-acceptance, positive relationships with others, autonomy, environmental mastery, purpose in life, and personal growth. The shortened version of the questionnaire only allows for a general measurement of personal well-being. The Polish adaptation of the Ryff scale was developed by Karaś and Cieciuch (2017). The overall reliability of the scale in the present study was high (Cronbach's $\alpha = .88$).

The Mini-COPE questionnaire by Carver (1997), adapted into Polish by Juczyński and Ogińska-Bulik (2009), consists of 28 statements with a 4-point response scale, which are part of 14 strategies for coping with stress. These strategies can be further grouped into *problem-focused strategies* (i.e., active coping, planning, or seeking instrumental support); *emotion-focused* (seeking emotional support, turning to religion, denial) and *avoidance/escape-focused* (venting, distracting oneself, quitting an activity, substance use, and humour). Cronbach's α for individual strategies in the present study ranged from .62 to .89.

PROCEDURE

The study was conducted between April and May 2025 by reaching out to respondents directly. The survey was part of a course seminar project[1]. Students received a QR code to access the electronic survey. The average time to complete the survey was approximately 10 minutes. The survey was conducted anonymously and voluntarily with the consent of the participants. The respondents were informed about the purpose of the study. The study was conducted in accordance with ethical standards and the principles of the Declaration of Helsinki. Participation was voluntary, anonymous, and based on informed consent. No sensitive personal or health-related data were collected, and the questionnaire was non-invasive and posed no risk to participants. In line with institutional and national regulations, formal ethics committee approval was not required. This research received no external funding. The data are available from the corresponding author upon reasonable request.

Statistical analyses were performed using SPSS version 25 and Amos software. The analyses included descriptive statistics, correlation analyses, and regression analyses. In addition, structural equation modelling was conducted to test the proposed mediation models.

RESULTS

The verification of the relationship between academic burnout and psychological well-being and stress coping strategies among the surveyed psychology students was carried out in a three-step process. The first step involved assessing the relationships among the studied variables (verification of hypothesis 1 – see Table 1). For this purpose, Pearson's correlation analyses were performed using SPSS-25 software. The relationships between academic burnout and psychological well-being were negative: for the factor "lack of engagement", $r = -.30$, $p < .001$; for the factor "exhaustion", $r = -.28$, $p < .001$; and for the overall level of educational burnout, $r = -.34$, $p < .001$. Thus, hypothesis 1a – that there is a negative relationship between students' academic burnout and their level of psychological well-being – was confirmed. In the case of relationships between stress coping strategies and academic burnout and well-being, the results were mixed. Problem-focused stress coping strategies were negatively correlated with academic burnout ($r = -.13$, $p = .013$) and lack of engagement ($r = -.16$, $p = .002$) while being positively correlated with psychological well-being ($r = .51$, $p < .001$). However, no significant correlations were found with the "exhaustion" factor. Avoidance-focused strategies were positively correlated with all aspects of academic burnout ("lack of engagement" $r = .16$, $p = .003$; "exhaustion" $r = .19$, $p < .001$; general factor $r = .21$, $p < .001$) and

Table 1

Values of relationships between the studied variables

Variable	1	2	3	4	5	6	7
1. Lack of engagement	1	.41**	.82**	−.30**	−.16**	−.07	.16**
2. Exhaustion		1	.86**	−.28**	−.06	−.05	.19**
3. Academic burnout – a general factor			1	−.34**	−.13*	−.07	.21**
4. Well-being				1	.51**	.02	−.41**
5. Problem-focused strategies					1	.19**	−.22**
6. Emotion-focused strategies						1	.15**
7. Avoidance-focused strategies							1

Note. $^{*}p < .05$, $^{**}p < .01$.

Table 2

Results of modelling the relationship between psychological well-being and explanatory variables

Independent variable	*B*	*SE*	*p*
Model 1			
(constant)	102.66	3.56	< .001
Academic burnout	−0.59	0.08	< .001
Standard error of the estimate = 10.66			
R^2 = .12			
Adjusted R^2 = .11			
Model 2			
(constant)	85.55	4.05	< .001
Academic burnout	−0.41	0.07	< .001
Problem-focused strategies	9.94	0.99	< .001
Avoidance-focused strategies	−8.41	1.33	< .001
Standard error of the estimate = 8.80			
R^2 = .40			
Adjusted R^2 = .39			

negatively correlated with psychological well-being (r = −.41, p < .001). However, no significant correlations were found between academic burnout and psychological well-being versus emotion-focused coping strategies. It can therefore be concluded that hypotheses 1b and 1c were only partially confirmed. The analyses based on the academic year and professional status did not reveal any significant differences in the analyses carried out; the results obtained were therefore universal for the entire study sample.

The next step in the analyses was to verify the direction of the studied relationships (verification of hypothesis 2). For this purpose, a linear regression analysis was performed using SPSS version 25 statistical software. Both the "lack of engagement" and "exhaustion" factors proved to be significant predictors of a decline in the psychological well-being of the students surveyed, but the strongest impact was noted for the general factor of academic burnout. For this reason, it was decided to focus only on the overall level of academic burnout in the further part of the analyses. As shown in the table below (model 1), the negative value of the ß coefficient for academic burnout indicates that higher burnout significantly predicts lower psychological well-being, confirming hypothesis 2a. The regression model explains approximately 12% of the variance in well-being.

Regression analysis taking into account stress coping strategies (model 2) showed that both problem-focused and avoidance strategies are also important explanatory variables for psychological well-being. Problem-focused strategies have a positive effect on psychological well-being, in contrast to avoidance-focused strategies, which exert a negative effect. This confirms, albeit only partially, hypothesis 2 b. Emotion-focused strategies did not prove to be a significant predictor of psychological well-being in the studied group of students. The regression model for psychological well-being, which also includes explanatory variables – stress coping strategies – explains about 40% of the observed relationship. As in the case of correlation analyses, neither the academic year nor professional status determined any significant differences in the models obtained.

The final stage of the analyses was to verify the mediating role of stress coping strategies in the relationship between academic burnout and psychological well-being in the studied group of students (verification of hypothesis 3). Due to the correlation and regression results obtained, the analysis was conducted only using strategies focused on the problem and avoidance. The emotion-focused strategies proved to have no significant relationship with the studied variables.

The first step was to check whether the variable "focus on the problem" (M) mediates the relationship between the level of "academic burnout" (X) and "personal well-being" (Y). The mediation analysis was conducted using SPSS version 25 software and the PROCESS Macro v4.1 (Hayes, 2013), model 4. Bootstrapping with 5000 samples was used to estimate confidence intervals for the indirect effect.

Based on the results already obtained, a negative relationship was assumed between "academic burnout" (X) and "personal well-being" (Y) and the level of "focus on the problem" (M); in contrast, a positive relationship was assumed between "focus on the problem" (M) and "personal well-being" (Y).

The resulting path diagram and its data fit parameters are presented in Figure 1 and Table 3.

As shown by the data (Table 3), the theoretical assumptions regarding the relationship between variables have been confirmed, and the parameters of the model as a whole are acceptable and interpretable (Konarski, 2009).

Thus, academic burnout (X) is significantly and negatively (β = −.28, p = .051) correlated with personal well-being (Y). A high level of X reduces the intensity of Y. The variable "academic burnout" (X) is also significantly and negatively (β = −.13) correlated with the variable "focus on the problem" (M). The intensity of X reduces the level of M. There is also a significant positive relationship (β = .47, p = .053) between "focus on the problem" (M) and "personal well-being" (Y). A high level of M intensifies Y. See Table 4.

Figure 1

Resulting path diagram for the mediation model

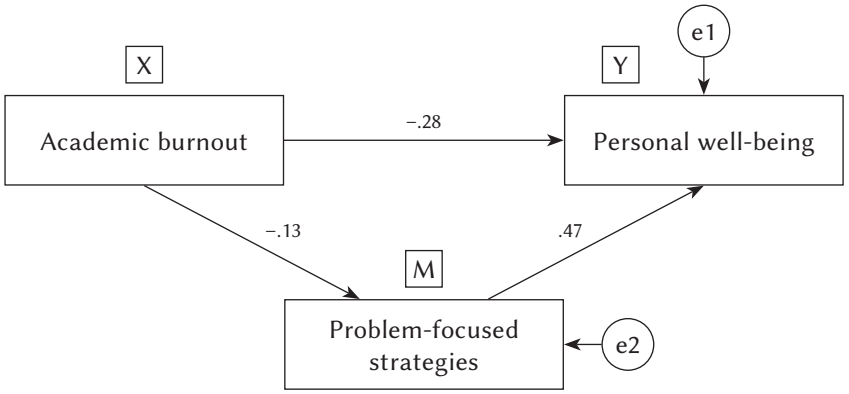

Table 3

Parameters of the global fit of the obtained model

$\chi^2(6) = 766.72$; $p = .012$	CFI = 0.91	RMSEA = 0.09	GFI = 0.90

Note. CFI – comparative fit index; RMSEA – root mean square error of approximation; GFI – goodness of fit index.

The results of the mediation analysis (PROCESS 4.1, model 4, 5000 bootstrap samples) indicate (Table 5) that the level of problem-focused strategies (M) mediates the relationship between academic burnout (X) and perceived psychological well-being (Y); this mediation is total.

The direct effect was statistically significant (β = −.28, 95% CI [−.35, −.06]), while the indirect effect was not statistically significant (β = −.06, 95% CI [−.24, −.08]).

Additional robustness checks, including control variables (academic year and employment status) using the HC3 estimator and subgroup analysis (based on the gender of the respondents), confirmed the stability of the results and the persistent effect of full mediation for the model. The effect also persisted even after the rejection of outliers.

There are therefore grounds for claiming that "academic burnout" (X) significantly worsens the quality of "personal well-being" (Y), although only when looking through the lens of "focus on the problem" (M), which acts as a buffer in this relationship.

The final step of the study was to determine whether the variable "avoidance/escape strategies" (M) mediates the relationship between the level of "academic burnout" (X) and "personal well-being" (Y). The mediation analysis was conducted in SPSS version 25, using PROCESS Macro v4.1 (Hayes, 2013), model 4. Bootstrapping with 5000 samples was used to estimate confidence intervals for the indirect effect.

A negative correlation was assumed between "academic burnout" (X) and "personal well-being" (Y), while a positive correlation was assumed with the "level of employing avoidance strategies" (M); likewise, a positive correlation was assumed between "avoidance strategies" (M) and "personal well-being" (Y).

Table 4

Values of standardised path coefficients (β) for the model in the relationship between variables

Variable	1	2	3
1. Academic burnout (X)	1	−.13**	−.28**
2. Problem-focused strategies (M)		1	.47**
3. Personal well-being (Y)			1

Note. ** $p < .05$.

The resulting path diagram and its data fit parameters are presented in Figure 2 and Table 6.

As shown by the data (Table 6), the theoretical assumptions regarding the relationship between variables have been confirmed, and the parameters of the model as a whole are acceptable and interpretable (Konarski, 2009).

Academic burnout (X) is significantly and negatively correlated with personal well-being (Y) (β = −.27, $p = .054$). The variable "academic burnout" (X) is significantly and positively correlated with the variable "problem avoidance strategies" (M) (β = .21, $p = .052$). There is also a significant positive relationship between "escape and problem avoidance strategies" (M) and "personal well-being" (Y) (β = .47, $p = .049$). See Table 7.

The results of the mediation analysis (PROCESS 4.1, model 4, 5000 bootstrap samples) indicate (Table 8)

Table 5

Parameters of mediation of the relationship between "academic burnout" and "personal well-being" from the perspective of "focus on the problem" (full mediation)

	Dependent variable: Personal well-being		
	Indirect effect	Direct effect	Total effect
Independent variable: Academic burnout	−0.06	−0.28***	−0.34***

Note. ***$p < .001$.

Figure 2

Resulting path diagram for the mediation model

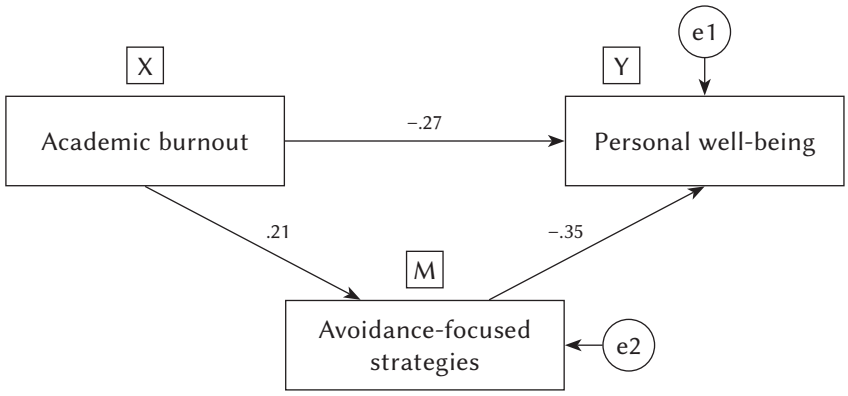

Table 6

Parameters of the global fit of the obtained model

$\chi^2(6) = 784.72$; $p = .011$	CFI = 0.92	RMSEA = 0.081	GFI = 0.903

Note. CFI – comparative fit index; RMSEA – root mean square error of approximation; GFI – goodness of fit index.

Table 7

Values of standardised path coefficients (β) for the model in the relationship between variables

Variable	1	2	3
1. Academic burnout (X)	1	.21**	−.27**
2. Avoidance-focused strategies (M)		1	−.35**
3. Personal well-being (Y)			1

Note. **$p < .05$.

that the level of avoidance/escape strategies (M) mediates the relationship between academic burnout (X) and perceived psychological well-being (Y); this mediation is partial.

The direct effect was statistically significant (β = −.27, 95% CI [−.33, −.04]); the indirect effect was also statistically significant (β = −.34, 95% CI [−.25, −.14]).

Additional robustness checks, including control variables (academic year and employment status) using the HC3 estimator and subgroup analysis (based on the gender of the respondents), confirmed the stability of the results and the persistent effect of full mediation for the model. The effect also persisted even after the rejection of outliers.

There are therefore grounds for claiming that "academic burnout" (X) significantly impairs the quality of "personal well-being" (Y), but only when looking through the lens of "avoidance strategies" (M). The use of such strategies intensifies these relationships. Academic burnout (X), together with avoidance strategies, reduces the sense of personal well-being (Y) more strongly than in a direct (unmediated) relationship. Both models confirm hypothesis 3 about the mediating role of stress coping strategies in the relationship between academic burnout and students' psychological well-being. However, the type of mediation depends on the type of strategies used. Those focused on the problem (task-oriented) act as a kind of buffer against the decline in psychological well-being. On the other hand, strategies aimed at avoidance and distraction can lead to a greater decline in the psychological well-being of students experiencing academic burnout. The universality of the results obtained (no effect of academic year or

Table 8

Parameters of mediation of the relationship between "academic burnout" and "personal well-being" from the perspective of "avoidance strategies" (partial mediation)

	Dependent variable: Personal well-being		
	Indirect effect	Direct effect	Total effect
Independent variable: Academic burnout	−0.34***	−0.27***	−0.61***

Note. ***$p < .001$.

professional status) provides the basis for rejecting hypothesis 4.

DISCUSSION

The results of the analyses supported the general hypothesis of a significant relationship between academic burnout and the psychological well-being of psychology students. As predicted, higher levels of burnout were associated with lower levels of well-being, which is consistent with previous studies indicating that chronic academic stress and excessive workload contribute to both reduced life satisfaction and increased psychopathological symptoms (Schaufeli et al., 2002; Vizoso et al., 2018). The correlation and regression values obtained indicate that burnout is a significant negative predictor of well-being – the model including this variable explained 12% of the variance, which, although moderate, is of practical importance in the context of young adults in university education. Indeed, it is worth emphasising the possible long-term consequences. Chronic burnout during university studies may lead to reduced life satisfaction and psychological well-being (Salmela-Aro et al., 2009), increased depressive symptoms (May et al., 2015), deterioration in physical health and quality of life, and challenges in adapting to the work environment after graduation (Robins et al., 2015). Research also shows that academic burnout has the potential to reduce future work engagement, increase the risk of career burnout, and hinder career development (Lesener et al., 2020). In this sense, academic experiences are predictive in nature and can have an impact on later life – both through their effect on mental health and on work performance and job satisfaction.

The findings on the role of stress coping strategies are particularly interesting. Analyses have shown that problem-focused strategies promote higher psychological well-being while mitigating the negative effects of academic burnout.

Such strategies (e.g., planning, active solution-seeking) are viewed in the literature as adaptive and protective in nature against the development of affective disorders (Compas et al., 2017). The mediation results in this study indicate that focusing on the problem acts as a buffer, mitigating the negative effects of burnout, which is consistent with the observations of Salmela-Aro and Read (2017), who describe task-oriented strategies as a protective factor in the process of academic adaptation. The results obtained are consistent with the job demands-resources (JD-R) model (Bakker et al., 2014), according to which the balance between academic demands (e.g., study load, exam pressure) and resources plays a key role in shaping the level of burnout and well-being. The adaptation of this model to students, proposed by Lesener et al. (2020), shows that academic demands are a significant predictor of burnout, while academic resources protect against its development and promote engagement. In this context, problem-focused strategies can be interpreted as an example of an individual resource that protects against the negative effects of excessive academic demands, although the authors emphasise the need for further research on the role of personal resources in the study demands-resources (SD-R) model.

Different results were observed with regard to avoidance strategies. In the group of students studied, the use of avoidance promoted both an increase in burnout and a decrease in well-being, and additionally mediated this relationship in the direction of its reinforcement. According to meta-analysis research (Eisenberg et al., 2019), avoidance is associated with a short-term reduction in tension, but in the long term it increases the risk of burnout, depressive symptoms and a decline in life satisfaction. The results of this study accord with this picture: avoidance strategies can intensify the vicious circle of academic stress, reducing well-being and perpetuating feelings of helplessness. What is particularly noteworthy is the lack of significant associations between emotion-focused strategies and well-being and burnout. The interpretation of this result is not straightforward. Firstly, it may indicate that emotional strategies – such as seeking emotional support or expressing emotions – do not play a key role in the context of academic requirements, which are inherently task-oriented and measurable. In other words, in an environment where success depends mainly on problem solving and effective time management, emotional actions may have limited effectiveness. Secondly, the lack of significant effects may be due to cultural and developmental factors – psychology students,

having greater knowledge of emotional processes, may be able to regulate their emotions cognitively to a greater extent, without relying on simple emotional strategies. Finally, research indicates that these strategies may work in situations where stressors are uncontrollable (e.g., in illness), but in situations where there is a real possibility of taking remedial action, their effectiveness decreases (Li et al., 2020). The lack of significant effects in the sample studied is therefore consistent with the broader picture of the context-dependent role of emotional strategies.

A most interesting aspect of the results is the lack of differences in the level of academic burnout and well-being depending on the year of study or the professional status of students. These results suggest that the mechanisms underlying burnout may be universal in nature – affecting the entire student population, regardless of their stage of education or concurrent professional activity. One possible explanation is that contemporary studies carry a similar level of workload at all stages of education. While earlier studies indicated an increase in burnout with each successive year (e.g., Salmela-Aro & Read, 2017), we are now observing a balancing of academic requirements – even first-year students experience high pressure related to a large number of responsibilities, competition, and the need to plan their careers. This may cause burnout to manifest itself early on and remain at a similar level in subsequent years of study. Another factor may be the changing nature of higher education. In many countries (including Poland), an increasing number of students take up professional work from the very beginning of their studies. As a result, professional status does not significantly differentiate the level of workload, as the pressure to combine study and work is becoming a common phenomenon. Thus, the experience of academic burnout is not limited to working students, as it also affects those who are not formally employed but face other stressors (e.g., financial insecurity, family expectations, career planning). It can also be assumed that individual resources and coping strategies play a greater role than objective factors such as year of study or employment status. Our analyses have shown that the use of adaptive (task-oriented) or non-adaptive (avoidance-oriented) coping strategies is of key importance. According to the SD-R model (Lesener et al., 2020), it is the relationship between demands and resources (individual and contextual) that determines the level of burnout. In this sense, the universality of the results can be explained by the fact that students, regardless of their year of study or professional work, face similar demands, and differences in their reactions depend more on their psychological resources than on the objective situation. Finally, it is worth noting that early experiences of burnout can become entrenched and accompany students for years to come, blurring the differences between cohorts. In other words, rather than an increase in burnout, we observe its relatively stable, chronic nature. This explanation is consistent with longitudinal studies pointing to the fact that once initiated, the burnout process tends to persist if adequate coping strategies and institutional support mechanisms are not put in place (Salmela-Aro et al., 2009).

In summary, the results confirm the significant impact of academic burnout on students' well-being and point to the role of coping strategies as key mechanisms differentiating the effects of this phenomenon. The lack of effects of emotional strategies emphasises that their role is context-dependent and not always adaptive in task-oriented situations such as higher education. The results also carry a warning: ignoring academic burnout can lead to serious consequences, not only during studies, but also in further professional and personal life.

CONCLUSIONS

Several conclusions can be drawn from this study. First, academic burnout reduces students' mental well-being. Higher levels of both exhaustion and disengagement are associated with lower levels of well-being. Burnout also proved to be a significant negative predictor of well-being, which supports the finding that it has a significant impact on students' functioning.

Second, problem-focused coping strategies serve a protective function. The use of task-focused strategies may promote higher mental well-being and mitigate the negative impact of burnout on well-being. In mediation analyses, these strategies acted as a buffer, which emphasises their adaptive nature. Avoidance strategies, on the other hand, exacerbate the negative effects of burnout. Escaping from problems and avoiding stressors is associated with lower well-being and higher levels of burnout. The mediation model confirmed partial mediation – these strategies reinforce the negative relationship between burnout and well-being. In the sample studied, no significant relationships between emotion-focused strategies and either burnout or well-being were observed. This may indicate that their impact is less pronounced in psychology students or depends on contextual factors. The results of the study have important practical implications for the academic environment. Firstly, they confirm the need to monitor students' burnout levels, implement preventive programmes, and promote adaptive stress coping strategies. One of the crucial factors determining students' resilience to stress and burnout is the satisfaction of their basic psychological needs. In their research, Barański and Poprawa (2024) found that fully satisfying the needs for autonomy, competence and relationships promotes high well-being and constructive coping strategies, while chronic frustration of these needs is associated with low life satisfaction, increased stress

and the use of non-adaptive strategies. It can therefore be assumed that failure to satisfy basic psychological needs increases susceptibility to burnout and thus to a reduction in well-being. If a student experiences a long-term lack of autonomy (e.g. excessive control by lecturers), a lack of competence (constant negative assessments) or a deficit in relationships (feelings of isolation), then the development of burnout symptoms is likely. It is therefore important for the academic environment to ensure that students' basic needs are met. This can be achieved by providing them with a degree of agency (e.g. opportunities to choose a specialisation or influence projects), supporting their sense of competence (through regular feedback and appreciation of efforts, not just criticism) and creating a climate of kindness and community at the university (integration initiatives, easy access for students to consultations, mentoring, etc.). At the institutional level, universities can take measures to reduce structural barriers that increase stress. These include simplifying administrative procedures, ensuring transparent rules for credits and examinations, and creating organisational support systems (e.g. tutors, academic advisors). The university may also implement preventive programmes focused on promoting mental health, including information campaigns and access to free psychological assistance. Such solutions reduce the burdens that are treated as "demands" in the JD-R model and promote better use of student resources.

Although neither the academic year nor the fact of parallel employment was a significant moderator of the observed relationships in the study, it is worth remembering that in the context of students who combine study with professional work, this group is more vulnerable to overload and burnout. Balancing the demands of both the university and employment can contribute to long-term stress, highlighting the need for targeted support (Schramer et al., 2020). Another major consideration is training programmes focused on developing planning, problem-solving, and work organisation skills, which can help improve students' mental wellbeing (Misra & McKean, 2000). The results obtained indicate that interventions should also include the reduction of avoidance strategies, e.g. through psychoeducation, self-regulation workshops or social support mechanisms.

LIMITATIONS AND STRENGTHS

Addressing the issue of academic burnout and its impact on student wellbeing is increasingly important, as it allows us to understand how the pressure associated with studying, responsibilities and social expectations affects the mental health of young people. Awareness of this problem is socially desirable, because it can lead to the creation of more effective strategies for supporting students, promoting mental health and introducing preventive measures at universities, but also to initiating changes in education programmes. Early recognition of the symptoms of academic burnout not only allows for an improvement in students' quality of life, but also increases their effectiveness and motivation for further development. This study also highlights the important role of stress management strategies in mitigating the decline in well-being in the face of emerging burnout. The relatively large sample size (N = 371) is a further advantage of the study, as it increases the reliability of the results. The reliability of the psychometric tools used was high, and the statistical analyses performed (correlations, regressions, mediations with bootstrapping) allowed for a multifaceted approach to the relationships studied. Another advantage is the inclusion of both negative factors (burnout, avoidance) and protective resources (task strategies), which allows for a more balanced interpretation of the results and the identification of practical directions for intervention. Although the results of the study are consistent and have a theoretical basis, several limitations should be pointed out. First, the study was based on self-report questionnaires, which carries the risk of response errors and the influence of subjective factors. Second, the study group consisted exclusively of psychology students, mostly from one university, which limits the possibility of generalising the results to the population of all students. Third, it was not possible to demonstrate the significant role of student employment status nor the effect of the year of study, which have been highlighted in other studies of this type. It therefore seems important to increase not only the size but also the representativeness of the sample. The analyses also did not take into account potential moderators, such as personality or social support mechanisms, which may differentiate the relationships between burnout and well-being. The inclusion of such variables in the analysed model of relationships may constitute the next stage of the present research.

Endnote

1 The study was conducted as part of a course seminar at the Institute of Psychology by the following students: Iwona Ulenberg, Jakub Lewandowski, Julia Kunkel, Marcin Tyl and Wiktoria Kurek.

Disclosures

This research received no external funding.
Institutional review board statement: Not applicable.
The authors declare no conflict of interest.

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