

## ACADEMIC BURNOUT: A GROWING CHALLENGE IN CONTEMPORARY HIGHER EDUCATION

*Sonja Ivančević<sup>1</sup>*

**Abstract:** Burnout syndrome, initially observed in workplace settings, has increasingly been recognized as a significant issue among university students. Academic or student burnout is a state of the uttermost exhaustion that results from prolonged exposure to stress in the academic environment. High academic demands, lack of support systems, and maladaptive coping mechanisms are some of the factors that contribute to its occurrence. To raise awareness of this prevailing disorder, the paper explores its characteristics and consequences. It also provides limited data on the burnout prevalence of Serbian university students. The findings show that burnout can lead to severe personal and academic outcomes, including depression, anxiety, and disengagement from studies, negatively affecting not only the students' health and performance, but also their families, the university, and the broader community. The paper emphasizes the need for further research, especially in underexplored student populations, to develop effective strategies for preventing and reducing burnout in academic settings.

**Keywords:** burnout, academic burnout, university students, burnout consequences, Serbian students

### 1. INTRODUCTION

Burnout syndrome is a widespread consequence of stress. It can be defined as a set of symptoms developed in a situation of long-term exposure to stress in the workplace or academic environment, often marked by emotional exhaustion, depersonalization, as well as reduced personal accomplishment [1]. It was first noticed and then investigated among medical personnel [2], then it was discovered that all 'helping professions', including psychologists, educators, social workers, and pedagogues, are susceptible to burnout syndrome [3]; finally, it was shown that members of all professions can experience burnout [3], [4].

After recognizing this phenomenon in employees, research has shown that burnout can also be experienced by students [5], [6]. Moreover, experts on the social aspect of sustainable development emphasize that one of today's greatest challenges in higher education is the presence of burnout syndrome in the population of students [7]. For this reason, experts and researchers from various fields, including psychologists, human resource management experts, pedagogues, educators, and health workers, as well as experts dealing with sustainable development, investigate different aspects of burnout syndrome in students, all with the shared goal of improving its understanding and reducing and preventing its occurrence. To help raise awareness of this prevailing disorder, this paper will explore the characteristics of burnout syndrome among university students, and its consequences, and provide the limited data available on its prevalence among engineering students in Serbia.

### 2. ACADEMIC BURNOUT

Student burnout research marked the turn of the 21<sup>st</sup> century. However, in recent years, increasing prevalence rates of burnout syndrome among university students have been recorded [8] and it is estimated that about 30% of students in developed countries, as well as

---

<sup>1</sup>Title, institution and address, email: MSc; University of Belgrade – Faculty of Organizational Sciences, Jove Ilića 154, Belgrade, Serbia; sonja.ivancevic@fon.bg.ac.rs

about 55% of students in developing countries, suffer from burnout syndrome to some extent [9]. The student population is particularly vulnerable to developing burnout syndrome due to a lack of necessary knowledge to identify symptoms, coupled with insufficient support systems to address the issue [10]. Yet, studies show that the prevalence of burnout syndrome, as well as its dynamics, can vary depending on the academic field, the specific university context, or the cultural and other characteristics of the surrounding environment, all of which raise the need for further research [8], [11]. This need is amplified by the conspicuous differences between different cohorts of students [12].

## 2.1. Characteristics of Academic Burnout

Student or academic burnout occurs as a response to prolonged stress in the academic environment, which can be caused by various internal and external factors [13]. Although it is similar to the burnout syndrome that occurs in the workplace [14], burnout syndrome in students has its specificities. Firstly, they are, reflected in the specific factors that contribute to its development. Secondly, student burnout is conceptualized and measured through components that differ to some extent from those used to assess employee burnout. Finally, research has shown that the factors contributing to burnout syndrome in employees may not always have the same impact or significance on burnout in university students.

One of the definitions of academic burnout describes it as a psychological syndrome that results from chronic academic stress and study overload and manifests itself as emotional exhaustion stemming from the demands of studies, a cynical and distant attitude towards academic work, and reduced effectiveness as a student [13]. As the definition suggests, this syndrome is caused by stressors specific to the academic environment or the student population and is most often manifested through physical and mental exhaustion, emotional detachment, psychological distance from academic responsibilities, general indifference, and insensitivity toward study tasks. Students who experience burnout syndrome often have a feeling of inadequacy that can be accompanied by a lack of enthusiasm, which can ultimately lead to a reduced quality of performance in their studies [15], as well as other consequences that will be discussed in the next section. Such conceptualization of burnout reflects Kristina Maslach's model of academic burnout consisting of three dimensions: exhaustion, cynicism, and professional efficacy.

Another model of student burnout syndrome also widely acknowledged, is that of Campos et al. [16] which conceptualizes burnout through four different dimensions of exhaustion, including personal burnout (which describes the general feeling of emotional and physical exhaustion of students), studies-related burnout (denotes the feeling of exhaustion stemming from academic responsibilities and workload), colleagues-related burnout (denotes the feelings of exhaustion stemming from relationships with fellow students) and teachers-related burnout (refers to feelings of exhaustion stemming from relationships with teaching staff) [16]. Thus, the sources of stress that cause student burnout are viewed from four perspectives, including two 'relational' dimensions. The absence of the dimension related to the primary relationship in which the burnout syndrome was observed, ie. a relationship that

implies ‘providing services’, and which is measured in employee burnout as ‘clients-related burnout’ [17] is evident. This suggests that even relationships that do not fundamentally imply unilateral ‘giving’ can be non-reciprocal and inappropriate, and in certain circumstances and under the influence of various factors, cause continuous stress that can result in burnout syndrome occurrence.

Bekić and Milačić [15] highlight that students, compared to other populations, exhibit moderate to high levels of burnout. They argue that one of the main causes of this problem is a heavy workload combined with a low level of perceived resources needed to manage it [15]. In addition, they point to the lack of self-regulation skills, insufficiently used active mechanisms for coping with stress, as well as the lack of adequate support as contributing factors. Apart from these factors, a competitive climate among students and academic staff, a high level of effort that is not recognized and adequately valued, excessive time spent studying that reduces the time for meeting personal needs and students’ leisure time, as well as pressures related to the financing one’s studies [18] can all contribute to the student burnout development.

### **3. CONSEQUENCES OF ACADEMIC BURNOUT**

It is thought that students may develop all psychological, physical, and emotional symptoms that also characterize employee burnout. However, research concerning the student population particularly indicates the following consequences of developed burnout syndrome: depression, anxiety, the appearance of suicidal thoughts [19], insomnia, elevated cholesterol, as well as problems with the cardiovascular and gastrointestinal systems [20]. In addition, dysfunctional patterns in behavior and communication are often observed, such as withdrawal and isolation, and minimizing interactions with others, which, when occur, are characterized by frequent conflicts; some students may also abuse drugs or alcohol [21]. These changes in behavior have an extremely negative impact on the social and family lives of students.

It is also important to emphasize the negative academic consequences associated with student burnout. These include a decline in motivation to study and complete university tasks, as well as reduced engagement [22]. Students who suffer from burnout often express dissatisfaction with their studies, exhibit lower class attendance [23] and experience a decline in learning ability and academic achievement [24]. Furthermore, the number of students who consider dropping out of their studies and those who actually do so is increasing due to burnout [25]. Additionally, research data show that student burnout is a progressive disorder that often worsens over time [26], negatively affecting a growing number of academic outcomes, as well as students’ preparedness for professional life, their future careers, and success [27].

Finally, from an organizational perspective, a high incidence of burnout syndrome among students can harm the overall competitiveness of a university or a faculty. This can lead to a decline in new enrollments [24] and, in the long run, damage the institution’s reputation.

## 4. ACADEMIC BURNOUT OF SERBIAN STUDENTS

Research on burnout syndrome among students in the Republic of Serbia began in the previous decade. However, the existing literature indicates that this specific population of students has not received sufficient attention from both the scientific and professional community and that the issue has not been adequately explored yet [11], [15]. Moreover, there is a need to focus on insufficiently researched student populations, including students of technical and technological sciences, as most of the existing studies included medical students [11], [28]. This need is highlighted by one of the few studies that surveyed engineering students in Serbia, published in 2022, which revealed alarming findings, with 66.33% of the students reporting personal burnout, and 45.54% of students experiencing burnout related to their studies (Table 1).

*Table 1 – Number of students per burnout scale by severity, the percentage of the sample, the mean and the standard deviation of the whole sample*

	Severity	Score	Number of students	Percentage of sample	Mean ± STD
Personal burnout	Moderate	50 - 74	234	40.07%	55.14 ± 21.67
	High	75 - 99	108	18.49%	
	Severe	100	22	3.77%	
Studies-related burnout	Moderate	50 - 74	191	32.71%	47.30 ± 20.33
	High	75 - 99	72	12.33%	
	Severe	100	3	0.50%	
Colleagues-related burnout	Moderate	50 - 74	72	12.33%	25.20 ± 22.61
	High	75 - 99	18	3.08%	
	Severe	100	4	0.70%	
Teachers-related burnout	Moderate	50 - 74	74	12.67%	22.32 ± 21.38
	High	75 - 99	14	2.40%	
	Severe	100	2	0.3%	

**Source:** International Journal of Engineering Education, 39 (3), p. 618 [29]

## 5. CONCLUSION

Burnout syndrome is a prevalent disorder that impacts the student population globally, and limited data also suggest that Serbian students are significantly affected by it. Considering all the mentioned effects of burnout, it can be concluded that the long-term consequences of student burnout syndrome negatively affect not only students' health, academic performance, and future work outcomes, but also their families, the university, and the broader community. Even though global rates of academic burnout are on the rise, many factors that could influence the development of this syndrome in students remain insufficiently explored. Also, certain student populations have not received adequate attention from researchers. These research gaps represent a critical area that needs to be addressed in order to develop effective strategies for preventing and combating burnout. Therefore, researchers and practitioners need to collaborate to create an academic environment in which students' health will be preserved [30].

### Acknowledgments

The author thanks the University of Belgrade – Faculty of Organizational Sciences for its support.

## 6. REFERENCES

- [1] Maslach, C.: *Burnout: The cost of caring*. Prentice-Hall, Englewood Cliffs, 1982.
- [2] Freudenberger, H. J.: Staff Burn- Out, *Journal of Social Issues*, vol 30, no. 1, pp. 159–165, 1974, doi: 10.1111/j.1540-4560.1974.tb00706.x.
- [3] Leiter M. P.; Schaufeli, W. B.: Consistency of the burnout construct across occupations, *Anxiety Stress Coping*, vol. 9, no. 3, pp. 229–243, 1996, doi: 10.1080/10615809608249404.
- [4] Jovanović, P.; Ivanović, T.; Maričić, M.; Ivančević, S.: Public Procurement Employees' Perception on Legal Changes, Perceived Red Tape and Job Stress: Evidence from Serbia, *Engineering Economics*, vol. 33, no. 5, pp. 507–520, 2022, doi: 10.5755/j01.ee.33.5.29934.
- [5] Ivančević, S.; Maričić, M.; Vlastelica, T.: Communication and academic burnout: The effects of social support and participation in decision-making, *Communications*, 2023, doi: 10.1515/commun-2022-0095.
- [6] Ivancevic, S.; Maricic, M.; Ivanovic, T.; Tepsic-Ostojic, V.; Stosic, S.: Burnout and coping strategies among future healthcare professionals: A structural equation modelling approach, *Vojnosanitetski Pregled*, vol. 79, no. 11, pp. 1111–1118, 2022, doi: 10.2298/VSP211006094I.
- [7] Reyna-Castillo, M.; Pulgarín-Rodríguez, M. A.; Ríos-Serna, V.; Santiago, A.: PLS-SEM Validation for Burnout Measures in Latino College Students: A Socially Sustainable Educational Return, *Sustainability*, vol. 14, no. 21, p. 14635, 2022, doi: 10.3390/su142114635.
- [8] Heinemann, L. V.; Heinemann, T.: Burnout Research, *Sage Open*, vol. 7, no. 1, p. 215824401769715, 2017, doi: 10.1177/2158244017697154.
- [9] Kagawa, M. M.; Kajjimu, J.; Sserunkuma, J.; Najjuka, S. M.; Atim, L. M.; Olum, R.; ... & Bongomin, F.: Prevalence of burnout among university students in low- and middle-income countries: A systematic review and meta-analysis, *PLoS One*, vol. 16, no. 8, p. e0256402, 2021, doi: 10.1371/journal.pone.0256402.

- [10] Palacio Sañudo, J. E.; Caballero Domínguez, C. C.; González Gutiérrez, O.; Gravini Gómez, M.; Contreras Santos, K. P.: Relationship between burnout and coping strategies with GPA in university students, *Universitas Psychologica*, vol. 11, no. 2, pp. 535–544, 2012.
- [11] Miltojević, V.; Ilić Krstić, I.; Orlić, A.: Burnout Among Students of Technical Faculties in Serbia – A Case Study, *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)*, vol. 10, no. 2, pp. 219–229, 2022, doi: 10.23947/2334-8496-2022-10-2-219-229.
- [12] Ivanovic, T.; Ivancevic, S.: Turnover intentions and job hopping among millennials in Serbia, *Management: Journal of Sustainable Business and Management Solutions in Emerging Economies*, vol. 24, no. 1, pp. 53–63, 2019.
- [13] Shin, H.; Lee, J.; Kim, B.; Lee, S. M.: Students' perceptions of parental bonding styles and their academic burnout, *Asia Pacific Education Review*, vol. 13, no. 3, pp. 509–517, 2012, doi: 10.1007/s12564-012-9218-9.
- [14] Reis, D.; Xanthopoulou, D.; Tsaousis, I.: Measuring job and academic burnout with the Oldenburg Burnout Inventory (OLBI): Factorial invariance across samples and countries, *Burn Res*, vol. 2, no. 1, pp. 8–18, 2015, doi: 10.1016/j.burn.2014.11.001.
- [15] Bekić, S.; Malčić, B.: Pandemija korona virusa i sindrom sagorevanja kod studenata, *Педагошка стварност*, vol. 68, no. 1, pp. 97–110, 2022, doi: 10.19090/ps.2022.1.97-110.
- [16] Campos, J. A. D. B.; Carlotto, M. S.; Marôco, J.: Copenhagen Burnout Inventory - student version: adaptation and transcultural validation for Portugal and Brazil, *Psicologia: Reflexão e Crítica*, vol. 26, no. 1, pp. 87–97, 2013, doi: 10.1590/S0102-79722013000100010.
- [17] Kristensen, T. S.; Borritz, M.; Villadsen, E.; Christensen, K. B.: The Copenhagen Burnout Inventory: A new tool for the assessment of burnout, *Work Stress*, vol. 19, no. 3, pp. 192–207, 2005, doi: 10.1080/02678370500297720.
- [18] Maroco, J.; Tecedreiro, M. M. V.: Inventário de Burnout de Maslach para e estudantes portugueses, *Psicologia, Saúde & Doenças*, pp. 227–235, 2009.
- [19] Rushton, C. H.; Batcheller, J.; Schroeder, K.; Donohue, P.: Burnout and Resilience Among Nurses Practicing in High-Intensity Settings, *American Journal of Critical Care*, vol. 24, no. 5, pp. 412–420, 2015, doi: 10.4037/ajcc2015291.
- [20] Ahola, K.; Hakanen, J.; Perhoniemi, R.; & Mutanen, P.: Relationship between burnout and depressive symptoms: A study using the person-centred approach, *Burn Res*, vol. 1, no. 1, pp. 29–37, 2014, doi: 10.1016/j.burn.2014.03.003.
- [21] Čarapina, I.; Ševo, J.: Odnos socijalne podrške i sagorijevanja studenata, *Školski vjesnik: časopis za pedagošku teoriju i praksu*, vol. 66, no. 1, pp. 9–25, 2017.
- [22] Sulea, C.; Van Beek, I.; Sarbescu, P.; Virga, D.; Schaufeli, W. B.: Engagement, boredom, and burnout among students: Basic need satisfaction matters more than personality traits, *Learn Individ Differ*, vol. 42, pp. 132–138, 2015, doi: 10.1016/j.lindif.2015.08.018.
- [23] Ramist, L.: *College Student Attrition and Retention*, College Board Report No. 81-1, 1981.
- [24] Neumann, Y.; Finaly-Neumann, E.; Reichel, A.: Determinants and Consequences of Students' Burnout in Universities, *J Higher Educ*, vol. 61, no. 1, pp. 20–31, 1990, doi: 10.1080/00221546.1990.11775089.
- [25] Salgado, S.; Au-Yong-Oliveira, M.: Student Burnout: A Case Study about a Portuguese Public University, *Educ Sci (Basel)*, vol. 11, no. 1, p. 31, 2021, doi: 10.3390/educsci11010031.

- [26] Dyrbye, L.; Shanafelt, T.: A narrative review on burnout experienced by medical students and residents, *Med Educ*, vol. 50, no. 1, pp. 132–149, 2016, doi: 10.1111/medu.12927.
- [27] Rudman, A.; Gustavsson, J. P.: Burnout during nursing education predicts lower occupational preparedness and future clinical performance: A longitudinal study, *Int J Nurs Stud*, vol. 49, no. 8, pp. 988–1001, 2012, doi: 10.1016/j.ijnurstu.2012.03.010.
- [28] Miltojević, V.; Ilić-Krstić, I.; Orlić, A.: Burnout in master's students: A case study, *Safety Engineering*, vol. 11, no. 2, pp. 65–68, 2021, doi: 10.5937/SE2102065M.
- [29] Ivančević, S.; Ivanović, T.; Maričić, M.; Čudanov, M.: Impact of online learning on engineering students' engagement, anxiety, and burnout amid the COVID-19 pandemic, *International Journal of Engineering Education*, vol. 39, no. 3, pp. 612–626, 2023.
- [30] Campos, J. A. D. B.; Jordani, P. C.; Zucoloto, M. L.; Bonafé, F. S. S.; Maroco, J.: Burnout in dental students: effectiveness of different methods, *Rev Odontol UNESP*, vol. 42, pp. 324–329, 2013.