

Systematic Literature Review: A Study of Academic Burnout among Undergraduate Students in Universities

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Abstract: Research on burnout has flourished within the educational environment or academic settings, with academic burnout gaining significant attention in recent decades. This systematic review aims to synthesize evidence from previous studies regarding the depiction and influencing factors of burnout among undergraduate students. The search strategy adhered to the PRISMA guidelines and was based on the following keywords: "burnout," "academic," "college," "undergraduate." Using five online databases, namely Scopus, PubMed, Taylor & Francis Online, ScienceDirect, and EBSCOhost, were 20 articles were obtained. The findings show that academic burnout undergraduate can be affected by internal and external factors. Academic burnout can have serious implications for students' well-being and academic performance, and it may also impact their mental health. This study provides recommendations for future research on the importance of addressing and preventing academic burnout among undergraduate students.

Keywords: Academic Burnout, College Students, Systematic Review, University

Introduction

The activities of undergraduate students at universities often involve various academic demands, pressures, and responsibilities. The pressures and demands experienced by students, coupled with expectations from themselves and others, can become significant sources of stress ([Hwang & Kim, 2022](#)). This can lead to a potential condition known as "academic burnout" ([Vizoso et al., 2019](#)). Academic burnout, as defined by Schaufeli et al. (2002), is characterized by feelings of exhaustion, cynical behavior, and a reduced sense of personal efficacy due to the multitude of academic demands. This can diminish an individual's academic motivation ([Fariborz et al., 2019](#)). Several studies indicate that college students are at risk of experiencing academic burnout, with recent research highlighting an increase in

academic burnout issues among students ([Rosales-Ricardo et al., 2021](#)). When this stress is not effectively managed, it can lead to academic burnout, encompassing reduced motivation for learning, feelings of laziness, and a decline in academic performance ([Lyndon et al., 2017](#); [Schaufeli et al., 2002](#)). Academic burnout is not solely an individual issue but can also impact the general well-being of students and their learning experiences.

At the international level, the burnout experienced by students in higher education has become a significant concern for various reasons ([Fariborz et al., 2019](#)). One reason is that academic burnout can serve as a key to understanding the diverse behaviors exhibited by students. Furthermore, academic burnout influences the level of students' commitment to the university, the extent of their involvement in academic affairs, and can impact their motivation to continue their education ([Lian et al., 2005](#)). Thus, academic burnout has a significant impact on various aspects of students' lives and experiences in college.

Throughout their academic journey, students face various challenging tasks, including adapting to new academic challenges, managing expectations from family, friends, and professors, and coping with changes related to personal development ([Fariborz et al., 2019](#)). These demands can result in high levels of psychological stress, feelings of dissatisfaction with life, dissatisfaction with oneself, depression, and anxiety ([Rogers & Maytan, 2019](#)). Due to these difficulties, students may experience negative emotions such as pain, sadness, a sense of failure, and feelings of inadequacy, ultimately leading to periods of burnout during their academic years ([Yıldız Akyol & Demir, 2019](#)).

Students experiencing high levels of academic burnout tend to achieve lower academic performance ([Fiorilli et al., 2017](#); [Schaufeli et al., 2002](#)). Additionally, academic burnout impacts their ability to cope with events in the university environment and increases symptoms of depression ([Fiorilli et al., 2017](#)). Similar studies conducted by Salmela-Aro et al. (2009) found a negative relationship between academic performance and a cynical attitude towards the university's meaning, along with feelings of incapacity to achieve success, ultimately negatively impacting motivation and academic performance.

Burnout not only affects students' academic achievements but also has negative repercussions on their physical and mental health, directly resulting in a serious decline in the quality of education. Consequently, some students may experience unfavorable life events, such as dropout ([Chue & Cheung, 2021](#)). Although academic burnout has been a major concern among researchers and higher education practitioners, most previous studies tended to focus on students from specific disciplines, with a particular emphasis on medical students ([Rosales-Ricardo et al., 2021](#)). Meanwhile, students from various disciplines at universities may also

experience academic burnout, but understanding the contributing factors to their academic fatigue and its impacts may still be limited.

Students often struggle to cope with academic burnout, making it challenging for them to achieve high performance in college despite their efforts in their studies. Some students may even tend to neglect their assignments and lose motivation to learn ([Salmela-Aro et al., 2009](#)). Academic burnout can also lead to a decrease in energy and motivation, affecting the ability to carry out daily activities and complete tasks ([Schaufeli et al., 2002](#)). Therefore, it is crucial to address academic burnout with more effective strategies, such as managing energy, seeking social support, and developing positive thinking patterns. This systematic literature review was conducted due to the existing limitations in the literature that have yet to extensively explore student burnout and the influencing factors ([Rosales-Ricardo et al., 2021](#)).

From this background, the researchers aim to synthesize evidence from previous studies regarding the depiction and influencing factors of burnout among undergraduate students. It is anticipated that this study will provide a positive contribution towards enhancing students' learning experiences and mitigating the negative impacts of academic burnout in higher education environments.

Research Method

The search strategies followed the Preferred Items for Systematic Review and Meta-analysis (PRISMA) guidelines ([Moher et al., 2009](#)). The keywords defined by the authors in the search encompass "burnout academic" AND/OR "burnout college" AND/OR "academic burnout college" AND/OR "burnout undergraduate" AND/OR "college students." The search was conducted in five journal databases, including Scopus, Pubmed, ScienceDirect, EBSCOhost, and Taylor & Francis Online. This research covers a specific time frame, specifically articles published between January 1, 2013 until September 30, 2023 and used several inclusion and exclusion criteria.

The research review investigates recent empirical studies based on the following inclusion criteria: First, articles listed in Scopus, Pubmed, ScienceDirect, EBSCOhost, Taylor & Francis Online. Second, articles published within the last 10 years, specifically from 2013 to 2023. Third, articles focusing on the undergraduate student population at universities. Fourth, articles written in the English language. Fifth, original research articles available in full text. Meanwhile, the exclusion criteria are as follows: First, studies involving employees or working students. Second, studies involving postgraduate students. Third, studies that do not address Burnout variables in undergraduate universities. And fourth, articles that are reviews or meta-analyses.

Based on the search results from all online research platforms yielded 1,295 articles identified through combined screening. After removing duplicate articles, titles, and abstracts, the authors narrowed down to 183 studies ready for further review. From there, 56 qualified full-text articles were obtained and 20 of them were selected for further analysis. The PRISMA flow diagram can be seen in Figure 1.

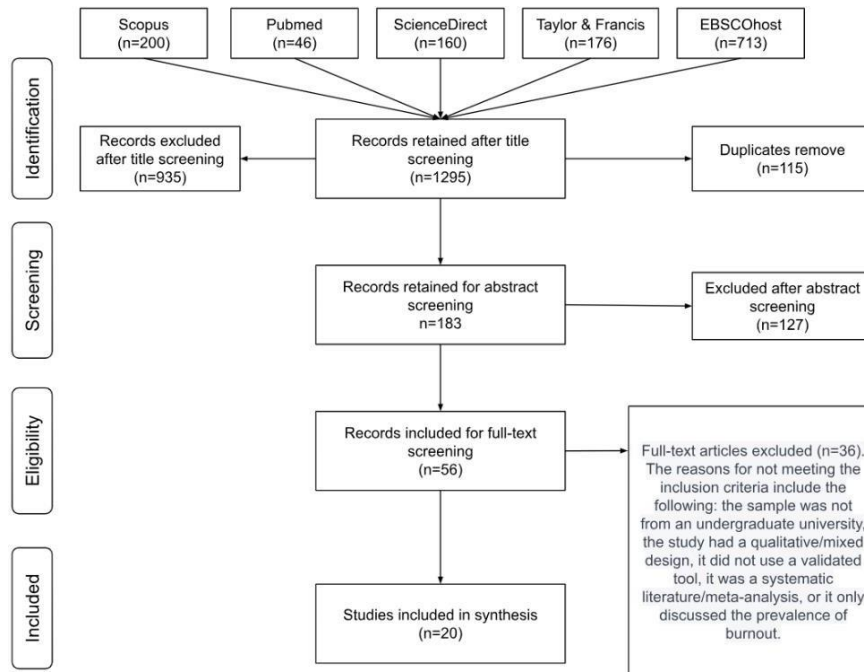


Figure 1 PRISMA Flow Diagram Process

Result and Discussion

20 relevant articles on the research topic have been identified. Participants involved in this study are undergraduate students aged between 18 to 29 years. The participants in the studies come from various countries, including the United States, Indonesia, China, Iran, Europe, Finland, Spain, New Zealand, and Korea. The total number of participants from these 20 studies is 13,419 undergraduate students at universities. The study included students from various academic disciplines, encompassing fields such as Medicine, Nursing, Psychology, Education, Social Sciences, Computer Science, Economics, Pharmacy, Linguistics, Arts Education, Music, Engineering, and several other unspecified disciplines.

Instrument Burnout

The study reviewed 20 quantitative research studies that employed a survey method and various instruments to measure burnout among university students. The instruments utilized included the Maslach Burnout Inventory-Student Survey (MBI-SS) ([Schaufeli et al., 2002](https://doi.org/10.58291/ijsecs.v3i1.198)).

Learning Burnout Questionnaire ([Lian et al., 2005](#)), Student Burnout Inventory (SBI-9) ([Salmela-Aro et al., 2009](#)), Copenhagen Burnout Inventory ([Kristensen et al., 2005](#)), and Academic Burnout Scale ([Bresó et al., 2007](#)).

Overview Across Various Countries

Burnout has garnered international attention, and there is a growing body of research on the subject. In an academic context, students engage in various activities that can be considered work from a psychological standpoint ([Schaufeli & Salanova, 2007](#)). Students participate in mandatory and structured activities such as attending classes, completing projects, or passing exams, and they may experience stress when they feel unable to cope with the demanding academic workload ([Schmidt et al., 2015](#)). For nursing students in Korea, academic burnout is described as leading to a loss of confidence, withdrawal from the environment, and frustration in studies ([Hwang & Kim, 2022](#)). Academic burnout in students arises from academic pressure or workload, depletion of energy, a gradual decline in students' enthusiasm for schoolwork and activities, indifferent attitudes, as well as unmet expectations and negative attitudes toward schoolwork outcomes ([Xie et al., 2019](#)). This definition aligns with previous research and employs the Maslach burnout concept with slight contextual adjustments. It is also consistent with Ling et al. (2014), who state that academic burnout is a condition in which students feel extremely tired, stressed, and lose interest in learning. Information regarding the characteristics of the studies, research designs, and main findings related to student burnout at universities is presented in Table 1.

Based on findings among Psychology students in Europe, receiving high academic grades can help reduce future student burnout, potentially reinforcing student engagement in learning ([Palos et al., 2019](#)). Academic burnout in students is not solely caused by academic pressure itself but is influenced by a variety of personal and environmental factors ([Firdausi et al., 2023](#)). Furthermore, research by Hao et al. (2021) suggests that students experiencing academic burnout may tend to use their smartphones as a means of escape from academic pressure. However, if this usage becomes excessive, it can develop into problematic smartphone use negatively impacting their well-being and academics.

Table 1. Summary and characteristics of the final studies selected

No	Authors	Country	Mean Characteristic	Variable	Study Design	Measure	Findings
1	(Hwang & Kim, 2022)	South Korea	180 nursing students	Stress, Depression, Anxiety, Academic Burnout	Cross-sectional	<ul style="list-style-type: none"> - Maslach Burnout Inventory Student Survey - Psychosocial Wellbeing Index - Center for Epidemiologic Studies Depression Scale - Spielberger's State-Trait Anxiety Inventory 	Academic burnout was positively correlated to stress, anxiety and depression. Inexperienced first and second-year students show higher levels of stress compared to third and fourth-year students.
2	(Xie et al., 2019)	China	A total of 1977 medical students from four universities	Academic Adaptability, Academic Burnout, Immersion in learning, Academic Performance	Cross-sectional	<ul style="list-style-type: none"> - University Academic Adaptability Questionnaire - Maslach Burnout Inventory Educators Survey - Work-Related Flow Inventory Evaluate final exam grades 	Academic adaptation is an internal factor that can influence student's academic burnout. It involves their ability to thrive in the academic environment.
3	(Rahmati, 2015)	Iran	120 students Alame Tabatabaee University	Academic Burnout, Self-efficacy	Cross-sectional	<ul style="list-style-type: none"> - Bresso's academic burnout questionnaire - Sherer's self-efficacy questionnaire 	There are negative associations between self-efficacy and academic burnout. Its consistent with research literature and Bandura's self-efficacy theory.
4	(Naderi et al., 2018)	Iran	402 bachelor's nursing students	Academic Burnout, Academic Performance, Need for Cognition, Self-efficacy	Cross-sectional	<ul style="list-style-type: none"> - Cacioppo and Petty's Need for Cognition Scale - General Self-Efficacy Scale - Maslach Burnout Inventory-Student Survey 	The mediating effect of self-efficacy in the relationship with academic burnout is significantly greater than the mediating effect of Need for Cognition
5	(Lyndon et al., 2017)	New Zealand	670 medical students from University of Auckland	Quality of Life, Burnout, Motivation, Academic Achievement	Cross-sectional	<ul style="list-style-type: none"> - World Health Organization Quality of Life-BREF - Copenhagen Burnout Inventory - Motivated Strategies for Learning Questionnaire - Academic Motivation Scale 	Student burnout negatively affects academic motivation, quality of life, and overall achievement. Lower burnout levels and higher quality of life correlate with improved academic motivation and exam performance.

No	Authors	Country	Mean Characteristic	Variable	Study Design	Measure	Findings
6	(Firdausi et al., 2023)	Indonesia	184 nursing students	Academic Burnout, Social Support, Self-efficacy	Cross-sectional	<ul style="list-style-type: none"> - Self-efficacy Questionnaire - Social support questionnaire - MBI-Student Survey 	Higher self-efficacy and social support levels may lead to lower academic burnout among nursing students.
7	(Hao et al., 2021)	China	748 Chinese undergraduate	Academic Burnout, Anxiety, Resilience, Problematic smartphone use	Cross-sectional	<ul style="list-style-type: none"> - Learning burnout scale - Connor–Davidson Resilience Scale-10 (CD-RISC-10) - Depression, anxiety, stress scale-21 (DASS-21) - Smartphone addiction scale 	Academic burnout is positively associated with anxiety and problematic smartphone use, while it is negatively associated with resilience
8	(Reed et al., 2023)	USA	108 University of Maryland School, Pharmacy	Resilience, Burnout, Wellness Behaviors, Academic Performance	Cross-sectional	<ul style="list-style-type: none"> - CD-RISC-10 - Oldenburg Burnout Inventory - Perceptions of Sleep Adequacy and Nutrition - Report the weekly hours in activities 	Resilience predicted reduced disengagement at semester-end, but its link with exhaustion was inconsistent. Wellness behaviors, resilience, and factors like nutrition and sleep can influence academic burnout levels and end-of-semester outcomes for students.
9	(Aguayo et al., 2019)	Spain	445 students in the University of Granada	Sociodemographic factors, Academic burnout syndrome	Cross-sectional	<ul style="list-style-type: none"> - Maslach Burnout Inventory Student Survey - Sociodemographic data questionnaire 	There is no significant relationship between academic burnout syndrome and age, marital status, number of children, and employment status of students.
10	(Seibert, 2017)	USA	550 from a major southeastern university	Emotion Regulation, Academic Performance, School Burnout	Longitudinal	<ul style="list-style-type: none"> - Emotion Regulation Questionnaire - School Burnout Inventory - MBI - Student Survey - GPA - Self-report on the number of classes they missed during the semester 	Students' emotion regulation strategies impact academic burnout, influencing outcomes like GPA and absenteeism. Then, emotion regulation strategies precede academic burnout, with burnout mediating their relationship with academic outcomes.

No	Authors	Country	Mean Characteristic	Variable	Study Design	Measure	Findings
11	(Charkhabiet al., 2013)	Iran	233 undergraduate students	Academic Burnout, Quality of Learning Experience, Self- efficacy	Cross-sectional	<ul style="list-style-type: none"> - Bresno's academic burnout scale - Sherer's self-efficacy scale - Quality of learning experience scale 	Academic burnout correlates significantly with quality of learning experience and self-efficacy. While, resource-related and professor-student relationship factors do not significantly relate to emotional exhaustion and academic inefficacy.
12	(Ling et al., 2014)	China	679 medical college and university students	Learning Burnout, Attribution Styles, Self-efficacy	Cross-sectional	<ul style="list-style-type: none"> - The Learning Burnout Scale - Attributional Style Questionnaire - Self-Efficacy Scale 	Self-efficacy and attributional styles negatively correlated with learning burnout. Field of study, scholarship status, grade, and total scores for attributional style and self-efficacy influenced 27% of learning burnout.
13	(Kong et al., 2021)	China	1219 nursing students	Proactive Personality, Professional SelfEfficacy, Academic Burnout	Cross-sectional	<ul style="list-style-type: none"> - Professional Self-Efficacy Scale - Academic Burnout Scale - Proactive Personality Scale (PPS) 	The prevalence of academic burnout among nursing students was 31.5%, with the highest subscale score attributed to improper behavior. Proactive personality, professional self-efficacy, and academic year demonstrated negative associations with academic burnout in nursing students.
14	(Kiema-Junes et al., 2020)	Finlandia	351 universitystudents	Burnout, Engagement, Social skills	Cross-sectional	<ul style="list-style-type: none"> - Student Burnout Inventory - The Utrecht Work Engagement Scale Student - Social skills questionnaire 	The relationship between higher levels of social skills and lower levels of burnout and higher levels of engagement.
15	(Y. Wang et al., 2020)	China	228 undergraduate students	Active Coping, Learning Burnout, Sleep Quality	Cross-sectional	<ul style="list-style-type: none"> - The Simplified Coping Style - Learning Burnout Questionnaire - Pittsburgh Sleep Quality Index-Chinese (PSQI-C) 	Poor sleep quality was positively associated with learning burnout, and active coping mediated its impact on burnout dimensions.

No	Authors	Country	Mean Characteristic	Variable	Study Design	- Measure	Findings
16	(Chen et al., 2022)	China	1270 undergraduate college students	Physical exercise, Academic Burnout, Resilience, Self-efficacy	Cross-sectional	- Physical Activity Rating Scale - Academic Burnout Scale - General Self-Efficacy Scale - Connor-Davidson Resilience Scale	Physical exercise is negatively linked to academic burnout, with no significant impact on resilience or its effect on academic burnout in males.
17	(Chang et al., 2016)	Korea	345 undergraduate students	Motivation, Perfectionism, Academic Burnout	Cross-sectional	- MBI -Student Survey - Academic Motivation Scale - Multidimensional Perfectionism Scale	Adaptive perfectionism was positively with motivation, and it showed a negative association with academic burnout.
18	(Vizoso et al., 2019)	Spain	532 Spanish undergraduate students	Coping, Optimism, Academic Burnout, Academic performance	Cross-sectional	- Coping Strategies Inventory - Life Orientation Test-Revised - Maslach Burnout Inventory-Student Survey - GPA	Academic burnout had a positive association with maladaptive coping but was negatively explained by adaptive coping. Furthermore, optimism significantly and negatively predicted emotional exhaustion. Lastly, academic performance was significantly influenced by academic burnout.
19	(Paloş et al., 2019)	Europe	142 psychology undergraduate students	Student Burnout, Academic Performance, Student engagement	Longitudinal	- Student's grades on Educational Psychology - Utrecht Work Engagement Scale – Student - MBI-Student Survey	Grades influence student engagement and burnout, but well-being do not affect academic performance.
20	(Meriläinen & Kuittinen, 2014)	Finland	3035 university students	Study-related burnout, Teaching–learning environment, Achievement Motivation	Cross-sectional	- Teaching–learning environment Questionnaire - Student Burnout Inventory (SBI-9) - Achievement motivation Scale	The more negative the students' perceptions concerning TLE, the higher their level of burnout is. However, the role of AM, which includes studying abilities, study success, and appreciation of studies is even more significant for the student's well-being.

Predictors of Academic Burnout

The second aim of this research is to identify predictors contributing to academic burnout among university students. Based on the study results, several variables can be identified as internal and external predictors of academic burnout.

From internal predictors of academic burnout. Positive correlations were found between several predictor variables related to student burnout, including anxiety ([Hao et al., 2021](#); [Hwang & Kim, 2022](#)), depression, and stress ([Hwang & Kim, 2022](#)). On the other hand, negatively correlated variables include academic adaptability ([Xie et al., 2019](#)), self-efficacy ([Charkhabi et al., 2013](#); [Chen et al., 2022](#); [Firdausi et al., 2023](#); [Kong et al., 2021](#); [Ling et al., 2014](#); [Naderi et al., 2018](#); [Rahmati, 2015](#)), need for cognition ([Naderi et al., 2018](#)), student engagement ([Kiema-Junes et al., 2020](#); [Paloş et al., 2019](#)), resilience ([Chen et al., 2022](#); [Hao et al., 2021](#); [Reed et al., 2023](#)), wellness behavior ([Reed et al., 2023](#)), attributional style ([Ling et al., 2014](#)), social skills ([Kiema-Junes et al., 2020](#)), sleep quality, and active coping ([Wang et al., 2020](#)), proactive personality ([Kong et al., 2021](#)), motivational types ([Chang et al., 2016](#); [Lyndon et al., 2017](#); [Meriläinen & Kuittinen, 2014](#)), perfectionism ([Chang et al., 2016](#)), academic achievement ([Lyndon et al., 2017](#)), adaptive coping, and optimism ([Vizoso et al., 2019](#)).

External predictors of academic burnout. Negative correlations were found between several predictor variables related to student burnout, including academic performance ([Reed et al., 2023](#)), academic engagement ([Xie et al., 2019](#)), immersion in learning ([Xie et al., 2019](#)), social support ([Firdausi et al., 2023](#)), quality of learning experience ([Charkhabi et al., 2013](#)), physical exercise ([Chen et al., 2022](#)), quality of life ([Lyndon et al., 2017](#)), and teaching–learning environment ([Meriläinen & Kuittinen, 2014](#)). On the other hand, a positive correlation with student burnout was found for problematic smartphone use ([Hao et al., 2021](#)).

Fundamentally, attributing meaning to burnout is a complex task in terms of defining, measuring, and understanding this phenomenon accurately ([Rosales-Ricardo et al., 2021](#)). It is further explained that burnout bears similarities to high stress but is not identical. In essence, burnout goes beyond the level of ordinary stress. Academic burnout is a state where an individual experiences prolonged stress involving physical and mental exhaustion, a cynical attitude, and academic inefficacy ([Salmela-Aro et al., 2009](#); [Schaufeli et al., 2002](#); [Maslach et al., 2001](#)). This burnout often arises from continuous internal and external pressures and negatively impacts individual well-being ([Allen et al., 2021](#); [Li et al., 2009](#)). Academic burnout is a problem that can affect the well-being and performance of students in higher education environments ([Fariborz et al., 2019](#)).

Academic burnout is a multidimensional concept consisting of three dimensions as defined by [Schaufeli et al. \(2002\)](#). Firstly, emotional exhaustion refers to feelings of fatigue and exhaustion arising from academic and learning demands. Students experiencing high levels of emotional exhaustion may feel too tired to cope with their demands. Secondly, depersonalization or cynicism describes a cynical attitude and a sense of detachment towards their learning or study experiences. Students experiencing depersonalization or cynicism may lose interest or feel distant from the material or academic environment. Thirdly, low personal accomplishment refers to feelings of incompetence as a student, tending to evaluate their educational context negatively. Students with low personal accomplishment may feel unsuccessful in achieving their academic goals ([Galbraith, C. S., & Merrill, 2015](#)). These three dimensions do not operate independently; rather, there is interaction and mutual influence among them. In this context, academic exhaustion is understood as a whole that involves these three dimensions, and they have a dynamic internal relationship, mutually influencing the student's experience of academic fatigue ([Schaufeli et al., 2002](#)).

From the analysis of 20 studies using various burnout instruments, it is essential to note the need to develop appropriate and valid instruments to measure burnout in students to obtain accurate and relevant research results ([Erschens et al., 2019](#)). While burnout has been extensively studied in professionals such as teachers, doctors, and police officers ([Aguayo et al., 2019](#); [Emilia et al., 2013](#)), recent research has also considered other population groups, including students ([Navarro-Abal et al., 2018](#)). Students need to invest more time and energy to complete numerous required and elective courses within four years to earn sufficient credits for graduation and prepare for job competition ([Kong et al., 2021](#)). Pursuing a university degree can be highly demanding as students face various academic, social, and personal challenges ([Aguayo et al., 2019](#)).

Academic burnout in students is influenced by both personal and environmental factors ([Firdausi et al., 2023](#)). Furthermore, it is explained that individual factors can provide self-affirmation to encourage a more positive outlook, while environmental factors can help students not feel alone in facing obstacles or problems. The quality of interaction between students and lecturers also plays a key role in this context ([Charkhabi et al., 2013](#)). Lecturers who show sensitivity to students' feelings and views and demonstrate empathy can contribute to reducing the level of burnout among students. Establishing a positive and supportive relationship has the potential to positively influence students' learning experiences, creating a more balanced and productive academic environment ([Meriläinen & Kuittinen, 2014](#)).

The condition of burnout can affect students' well-being and negatively impact their learning outcomes, psychological well-being, quality of life, and academic performance ([Lyndon et al.,](#)

[2017](#); [Palos, 2019](#)). This includes self-efficacy, resilience, social support, classroom learning models, academic procrastination attitudes, and self-regulation ([Hamilton-Shield et al., 2022](#)). Students with a more positive attributional style and higher levels of self-efficacy tend to experience lower levels of academic burnout ([Ling et al., 2014](#)). This means that students who tend to view things more positively and have higher self-confidence are less likely to experience high levels of academic burnout. Positive self-perception and the ability to cope with academic challenges can protect students from high levels of academic burnout ([Firdausi et al., 2023](#)). It has been proven that self-efficacy with burnout consistently yields results in line with research literature and Bandura's self-efficacy theory ([Rahmati, 2015](#)). Individuals with high self-efficacy feel more efficient after failure, attributing it to insufficient effort and incomplete knowledge and skills that can be achieved. This attribution style can prevent academic burnout ([Rahmati, 2015](#)).

Students from various majors in Spain have stated that in the first year, they tend to experience higher levels of emotional exhaustion compared to those in subsequent years ([Aguayo et al., 2019](#)). This may be because students in subsequent years have better academic adaptation, where the better students adapt to the academic learning environment, the lower the risk of academic burnout, the higher the level of engagement in learning, and the better their academic performance ([Xie et al., 2019](#)). Although the differences are not significantly significant and are at a moderate level, there is a significant correlation between students' age and the level of emotional exhaustion they experience ([Aguayo et al., 2019](#)). In other words, younger students have slightly higher levels of emotional exhaustion than older students. This is also in line with Reed et al., (2023) stating that burnout issues have already emerged in the early stages of study before they enter the pharmacy profession.

The relationship between demographic characteristics and academic burnout is not always consistent ([Kong et al., 2021](#)), while other research has found that gender is not related to academic burnout ([Aguayo et al., 2019](#); [Chen et al., 2022](#)). One study found that male students had higher levels of academic burnout than female students ([Wang et al., 2019](#)). Male students in Spain experienced higher depersonalization symptoms and achieved lower levels of personal accomplishment compared to female students ([Aguayo et al., 2019](#)). These differences could be related to how students handle challenges they face during their study period. Female students tend to focus more on emotional aspects and empathetic abilities, which may explain why the level of depersonalization is higher in male students.

Students experiencing academic burnout often feel burdened by academic pressure, such as the demands of assignments, exams, and high expectations ([Hwang & Kim, 2022](#)). In an effort to cope with this pressure, they may use smartphones as an escape tool that can provide quick

entertainment, such as social media, games, or other online entertainment, making them feel more comfortable temporarily. Interestingly, there is a positive relationship between academic burnout and smartphone use among students (Hao et al., 2021). Students facing academic burnout are prone to excessive smartphone use, employing it as an escape from academic challenges and stress. Problematic smartphone habits, especially nocturnal use, disrupt healthy sleep, worsening burnout by escalating stress and emotional exhaustion (Lehto et al., 2019; Xie et al., 2019). Subpar sleep quality significantly correlates with academic burnout in university students (Wang et al., 2020), and sleep-deprived students often experience heightened burnout levels, impacting cognitive abilities crucial for academic success.

Conclusions

The phenomenon of burnout among students is caused by the complex interaction of internal and external factors. Both of these factors play a crucial role in the level of burnout experienced by students. The manifestations of burnout include emotional exhaustion, depersonalization, and academic decline. Burnout can have serious implications for the well-being and academic performance of students, and it can also impact their overall mental health. It is crucial for the entire academic community in universities to comprehend the serious impact of burnout on students, including educators, peers, and the students themselves. Therefore, collective efforts are needed to address and prevent burnout among students.

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