

Academic Fatigue in Asian Higher Education: A thematic literature review

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Abstract

Academic fatigue affects students' motivation, academic performance, and mental health. This study aims to identify and analyze factors contributing to academic fatigue among students in Asian higher education institutions through a thematic literature review. A systematic search of 25 peer-reviewed articles indexed in Scopus and Web of Science (WoS) between 2020 and 2025 was analyzed using qualitative thematic analysis. The findings reveal factors of academic fatigue: (1) sociodemographic influences; (2) pressures from field of study selection; (3) academic stress; (4) psychosocial stress; (5) financial constraints; (6) safety-related stress; (7) academic distraction from social media; (8) time management difficulties.

Keywords: Academic Fatigue, Higher Education, Asia, Thematic Review

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1.0 Introduction

Academic fatigue is a multifaceted condition marked by prolonged mental, emotional, and physical exhaustion, leading to disengagement, reduced motivation, and cognitive impairments that impact student performance and institutional quality (Mosleh et al., 2022). The objectives of this study are to identify fatigue-related phenomena through an Asia-focused thematic perspective and to analyze factors contributing to academic fatigue among students in Asian higher education institutions through a thematic literature review. The review is significant for higher education policy and practice, contributing to theoretical discourse and providing insights to help policymakers, educators, and institutional leaders develop interventions that enhance students' resilience, well-being, and academic success.

2.0 Literature Review

Academic fatigue, while sometimes conflated with academic burnout, refers explicitly to the subjective experience of tiredness, low energy, and reduced cognitive capacity. Recent studies have explored its causes, correlations, and effects. It is particularly prevalent

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in Asia due to sociocultural norms and the structural features of educational systems. Asian higher education often operates in exam-driven, competitive environments shaped by collectivist values and high parental expectations for achievement. For instance, a 2021 survey of 1,211 Malaysian students revealed that 60.5% experienced anxiety, 45.6% depression, and 40% stress, all strongly linked to fatigue risk (The Star, 2025). Research often prioritizes academic burnout, stress, or mental health without explicitly framing these issues in terms of fatigue. For example, a cross-sectional study of nearly 23,000 Chinese students found that 59.9% reported academic burnout, characterized by emotional exhaustion and reduced personal accomplishment (Liu et al., 2023). Conversely, academic resilience was identified as a protective factor in a Taiwan-based study, where 12% of international students experienced high levels of academic burnout

Previous research has often treated academic fatigue as a secondary concern, with the primary focus being on stress, anxiety, or burnout. A large-scale study in China ($n = 22,983$) investigated academic burnout among university students using the Maslach Burnout Inventory, revealing that 59.9% of participants met the criteria for burnout. Key predictors included gender, year of study, and lifestyle factors such as cigarette smoking.

Although the study does not explicitly use the term "fatigue," emotional exhaustion—a central component of burnout—closely aligns with the concept of fatigue. In a separate cross-sectional study conducted in Guangxi, psychological distress was examined in relation to academic burnout among 1,067 medical students. The findings indicated that perceived stress was positively linked to academic burnout, while self-efficacy and self-esteem were negatively associated with it. The results suggest that students with higher self-efficacy and self-esteem experience fewer adverse outcomes, including symptoms like fatigue, such as low motivation and exhaustion (Kong, 2025).

Studies specifically focused on academic fatigue remain limited but are emerging. For instance, a survey of students at Universitas Negeri Padang ($n = 468$) revealed a strong positive correlation ($r = 0.593$, $p < 0.001$) between academic stress and fatigue, measured using the Multidimensional Fatigue Inventory-Short Form. Students experiencing higher academic stress reported greater fatigue (Ramadhani, 2024). Another study explored the relationship between technostress and sleep quality among 1,356 Indonesian university students, finding that poor sleep quality and increased technostress were significantly associated, leading to fatigue-related outcomes such as reduced alertness and exhaustion. Although the term "academic fatigue" was not explicitly used, the overlapping symptoms suggest that technological demands and disrupted sleep are critical risk factors in Asian contexts (Hapsari, 2024).

In conclusion, academic fatigue, while sometimes conflated with academic burnout, refers explicitly to the subjective experience of tiredness, low energy, and reduced cognitive capacity. In the context of Asian higher education, it is emerging as a significant concern, alongside established concepts such as burnout and academic stress.

3.0 Methodology

This study employs a qualitative approach, utilizing the systematic literature review (SLR) method to analyze and critically evaluate previous research findings through a structured filtering process.

3.1 Searching Strategies

Article sources were collected and filtered using the PRISMA method, with a focus on meeting eligibility and exclusion criteria for the study. A systematic review was conducted, encompassing the stages of identification, screening, eligibility assessment, data extraction, and content analysis.

3.2 PRISMA

The PRISMA Statement guidelines, which outline Preferred Reporting Items for Systematic Reviews and Meta-Analyses, were employed for this review. PRISMA facilitates the formulation of clear research questions and supports systematic reviews by filtering identified articles through inclusion and exclusion criteria aligned with the research question, enabling efficient analysis of large databases. This approach ensures a comprehensive search for studies related to academic fatigue in Asian higher education.

3.3 Systematic Searching Strategies

The SLR process consists of three sub-processes: identification, screening, and eligibility assessment, to locate relevant and suitable articles from databases indexed in Scopus and Web of Science (WoS).

3.4 Identification

Identification is the process of searching for terms and keywords related to the study's central concepts. It aims to provide a broader selection of articles from the chosen databases. The keywords are derived from the research question, and the identification process relies on peer-reviewed article databases. The authors expanded existing keywords and developed a comprehensive search string. These keywords were used to locate relevant articles. Table 1 presents the search string employed in this study, which retrieved a total of 577 articles from peer-reviewed databases.

Table 1: The Search String

Scopus
TITLE-ABS-KEY ("academic" OR "types of academic" OR "academic info") AND ("fatigue" OR "types of fatigue" OR "stress" OR "types of stress" OR "burn out" OR "types of burn out") AND ("higher education" OR "higher education in Asia" AND (LIMIT-TO (PUBYEAR, 2020) OR (LIMIT-TO (PUBYEAR, 2021) OR (LIMIT-TO (PUBYEAR, 2022) OR (LIMIT-TO (PUBYEAR, 2023) OR (LIMIT-TO (PUBYEAR, 2024) OR (LIMIT-TO (PUBYEAR, 2025) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (PUBSTAGE, "final")) AND (LIMIT-TO (LANGUAGE, "English"))
Date of Access: September 2025
WoS
(academic OR *types of academic* OR *academic info*) AND ("fatigue" OR "types of fatigue" OR "stress" OR "types of stress" OR "burn out" OR "types of burn out") AND ("higher education" OR "higher education in Asia" (Topic) and 2020 or 2021 or 2022 or 2023 or 2024 or 2025(Publication Years) and Article (Document Types) and English (Languages)
Date of Access: September 2025

(Source: Author's compilation)

3.5 Screening

This study filtered the 577 collected articles by applying the selected criteria for article selection. The process was automated using the database's sorting function, guided by the research question established earlier. The screening procedure was necessary because manually reviewing all published articles based on criteria such as publication period, timeline, language, and document type is impractical. Articles published between 2020 and 2025, particularly mentioning Asia and higher education were selected, with only English-language articles from Scopus and WoS-indexed journals included. During this process, 498 articles were excluded for not meeting the inclusion criteria, leaving 65 articles for the eligibility assessment.

3.6 Eligibility and Exclusion Criteria

This study exclusively included journal articles, excluding reviews, books, book series, and book chapters. The search was limited to English-language publications from the past five years (2020–2025). The study's scope is focused explicitly on academic fatigue in Asian higher education.

Table 2: Criteria, Data Entry, and Exceptions

Criteria	Data Entry	Exceptions
Type of Document	Journal	Article, Book, Book series, Book chapter
Languages	English languages	Other than English
Publication Line Period	2020-2025	< 2020
Publication Stage	Final	In Progress

(Source: Author's compilation)

3.7 Thematic Review Stages

The PRISMA flow in Figure 1 thoroughly illustrates the thematic review procedure used in this investigation. This flowchart shows the main stages completed: study identification, screening, and eligibility evaluation.

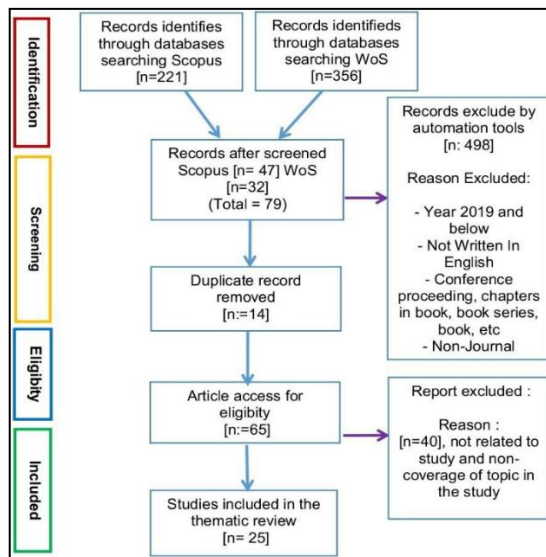


Fig. 1: Flow diagram of the proposed searching study

3.8 Data Abstraction and Analysis

A total of 25 articles were thoroughly reviewed and analyzed, focusing on studies that addressed the research questions of this review. The analysis began with reading the abstracts, followed by a detailed examination of the full articles to extract information on academic fatigue in Asian higher education. Qualitative content analysis was then employed to identify themes related to the factors contributing to academic fatigue in higher education institutions across Asia.

4.0 Findings

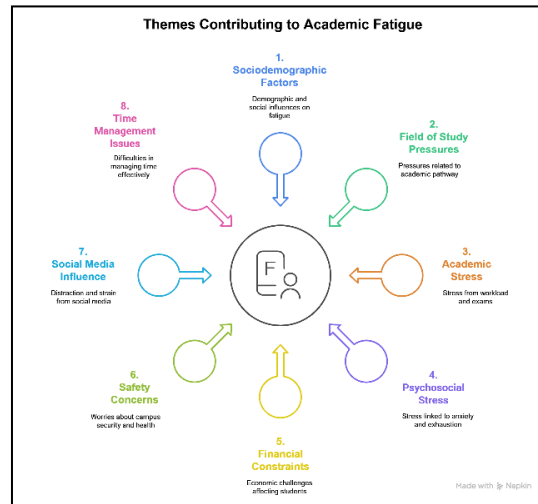


Fig. 2: Theme Contributing to Academic Fatigue (Source: Author's compilation)

Table 3: Empirical Analysis of Reviewed Articles by Theme

Bil	Theme	Articles
1	Sociodemographic influences	1: Prevalence of depression and its correlates among undergraduate health science students in Mogadishu, Somalia: A cross-sectional study 2: Student fatigue and its impact on teaching effectiveness based on online teaching
2	Pressures related to the field of study selection and academic pathways	23: Challenging suicide, burnout, and depression among veterinary practitioners and students: text mining and topics modelling analysis of scientific literature 25: Exploring the interconnections of loneliness, anxiety, and depression among nursing students: a network analysis
3	Academic stress stemming	5: Deciphering the underlying repercussions of cognitive overload on university students' fatigue, frustration and academic productivity: Implementation of stimulus–organism–response model 8: An Explainable Student Fatigue Monitoring Module with Joint Facial Representation 17: Cross-Sectional Survey Assessing Mental Health, Fatigue, and Sleep Among Male Medical Students in Western Saudi Arabia During and After Examination Periods. 18: Examining the effects of academic stress on student well-being in higher education
4	Psychosocial stress	12: Zoom fatigue related to online learning among medical students in Thailand: Prevalence, predictors, and association with depression 22: Fatigue and the psychological characteristics of medical student
5	Financial and economic constraints that exacerbate student vulnerability	12: Relationship between Perfectionism, Academic Burnout, and Life Satisfaction in University Students: School Belonging as a Mediator 20: Exploring the interplay of stress, fatigue, and empathy: The mediating role of cognitive flexibility in enhancing the well-being of university students in medical and social disciplines
6	Safety-related stress	7: The Impact of COVID-19 Fatigue and Pandemic Burnout alongside Academic Stress on the Gingival Health of Dental Students 10: Examining the effects of moral distress, compassion fatigue, and burnout on intention to leave among nursing students in Hong Kong: A cross-sectional study 14: Does Match Really Matter? The Moderating Role of Resources in the Relation between Demands, Vigor, and Fatigue in Academic Life 15: Emotional fatigue, academic engagement, and satisfaction with studies during the return to post-pandemic university attendance 19: Learning in crisis: self-regulation, routine-facilitated well-being, and academic stress among higher education students
7	The influence of social media on academic distraction and psychological strain	3: Exploring perceptions of cognitive load and mental fatigue in pandemic-era Zoom classes. 4: Reduce Academic Fatigue and Enhance Retention for The Determined Ones (TDOs) in Online Learning 11: Zoom fatigue related to online learning among medical students in Thailand: Prevalence, predictors, and association with depression 6: Digital Overload: Understanding Social Media Fatigue in Higher Education Based on Demographics and Technology Usage

		13: Active methodologies associated with online learning fatigue among medical students
8	Time management difficulties.	9: Computer vision syndrome and its relationship with sleep and fatigue in medical students 16: The impact of academic anxiety on smartphone addiction among college students: the mediating role of self-regulatory fatigue and the moderating role of mindfulness

(Source: Author's compilation)

5.0 Discussion

5.1 Sociodemographic influences

This sociodemographic factor encompasses several aspects, including gender, socioeconomic status, and family background. Chen and Qin (2024) reported that male students are more likely to experience fatigue quickly compared to female students. This highlights a significant gender-based difference in the influence of academic fatigue among higher education students. From a socioeconomic perspective, poverty and low-income family backgrounds also limit students' access to sufficient facilities and funding to pursue higher education. Additionally, the study found that seasonal changes in countries with four seasons influence students' learning styles, as each season introduces unique aspects of fatigue that vary by gender.

5.2 Pressures related to the field of study selection and academic pathways

The second factor contributing to academic fatigue involves pressures associated with the choice of field of study and educational pathways. According to Brscic et al. (2021), veterinary students are more likely to experience stress and pressure, which can lead to suicidal intentions during their time in higher education institutions. This is often because many students are not genuinely interested in the fields they pursue and are compelled to choose them out of necessity for employment. Furthermore, the curriculum in this field requires students to confront the realities of life and death in animals, which has a profound emotional impact. Similarly, Mi Yuqing's (2025) study highlighted that in medicine, nursing is the leading contributor to depression and anxiety among students due to the demanding clinical training and rigorous academic requirements, which demand a high level of mastery to succeed as a nurse.

5.3 Academic stress stemming

Universities impose various conditions and criteria for graduation. Academic pressure from assignments, exams, and performance throughout their studies significantly contributes to academic burnout among students. This is supported by Pang's (2025) study, which highlights that the cognitive load students face, such as retrieving data for assignments, negatively impacts their ability to access academic materials that meet the required standards. The pressure of exams further exacerbates stress among students, as it limits their capabilities. Khan's (2025) study highlights that exam week is a major contributor to student depression due to the need for extensive revision, which results in less rest and insufficient sleep. The study recommends implementing post-exam recovery activities to help students restore their mood and mental well-being.

5.4 Psychosocial stress

The next factor contributing to academic fatigue is psychosocial stress, which includes anxiety, emotional exhaustion, and depression. Many students experience severe anxiety symptoms, fatigue, headaches, and feelings of discouragement. This stress primarily affects their mental well-being, subsequently influencing their interactions, academic performance, emotions, and motivation to learn. Walkiewicz (2023) found that early identification of specific psychological traits in medical students, such as unstable emotions and negative self-perceptions, could be addressed through early support and development programs.

5.5 Financial and economic constraints that exacerbate student vulnerability

Economic factors are closely tied to student performance in higher education institutions, as financial struggles often limit students' access to essential facilities. Wang (2025) suggests that having sufficient financial resources enhances self-confidence compared to students who lack such support. This is particularly relevant for medical students, who require significant funding to acquire the necessary equipment for their studies.

5.6 Safety-related stress

This theme explores how personal safety significantly contributes to academic fatigue. Students from countries experiencing famine and poverty face ongoing challenges, particularly concerning their mental health, as they are constantly preoccupied with thoughts of their safety and survival. In response, universities play a crucial role in providing comprehensive facilities and support to ensure students remain in a safe and healthy environment, enabling them to pursue their studies effectively. Hadad (2025) further emphasizes the importance of targeted interventions during crises, such as self-regulation training, adaptive routines, and flexible learning models, to enhance students' resilience under severe stress.

5.7 The influence of social media on academic distraction and psychological strain

Social media offers significant benefits for students, but excessive use can negatively impact their quality of life and learning outcomes. Lottin et al. (2021) found that prolonged engagement with online platforms leads to fatigue, anxiety, and stress, while information overload hampers students' ability to filter relevant content, manage tasks, and maintain focus, ultimately reducing academic productivity. Khairati et al. (2025) further observed that extended social media use intensifies fatigue, resulting in

psychological consequences such as stress, anxiety, and depressive symptoms. This underscores how digital overload affects both cognitive performance and emotional well-being. Charoenporn (2024) recommended targeted interventions, such as reducing online sessions and promoting lifestyle adjustments, to alleviate the effects of digital overload.

5.8 Time management difficulties

Inefficient time management can contribute to academic fatigue, as noted by Kong (2025), who observed that individuals with high mindfulness levels strengthen the connection between academic anxiety and self-regulatory fatigue. This smartphone addiction has become a significant factor in exacerbating academic fatigue, as excessive and compulsive smartphone use not only increases distractions during study time but also leads to reduced concentration and procrastination. This overdependence on digital devices is also linked to sleep deprivation, as prolonged screen time and late-night usage disrupt healthy sleep patterns, impairing cognitive performance, emotional regulation, and overall academic productivity (Garlock, 2025).

6.0 Conclusion & Recommendation

In conclusion, academic fatigue is closely associated with reduced cognitive engagement, diminished academic motivation, and decreased persistence. This review highlights that academic fatigue is not merely an extension of burnout but a distinct issue requiring scholarly attention. Unmanaged academic fatigue can result in academic underachievement, disengagement, and mental health challenges. The review also identifies several mitigating factors, such as social support, resilience, and adaptable teaching strategies, that can help reduce the adverse effects of fatigue. Longitudinal, mixed-methods, and comparative studies are urgently needed to provide more detailed insights into the dynamics of academic fatigue across different Asian countries. However, this review is limited to the analysis and findings from previous research, and there is a need for further study regarding the phenomena in the real field.

Comparative research between Asian nations would be particularly valuable in identifying the institutional, structural, and cultural factors that contribute to academic fatigue. Universities must take proactive steps to address academic fatigue at the institutional level. In educational cultures dominated by strict curricula and high-stakes exams, workload policies should be reviewed to prevent excessive strain on students. Flexible learning arrangements, blended learning approaches, and ongoing evaluation methods that reduce stress without compromising academic integrity could be beneficial. Additionally, institutions should enhance student support services by integrating peer mentoring, counseling, and resilience-building initiatives into the classroom. Faculty training is also crucial, as educators need to be aware of the signs of academic fatigue and adopt teaching strategies that promote student motivation and engagement rather than adding to their workload.

Students play a central role in addressing academic fatigue, so it is essential to provide them with the resources needed to navigate classroom challenges more effectively. Awareness campaigns can help students recognize early signs of exhaustion and seek assistance when necessary. Peer support networks, which are often underutilized in Asian contexts, should be encouraged to foster supportive and motivating communities. Furthermore, students can benefit from accessible, real-time interventions offered through digital platforms and mobile health applications, which promote time management, emotional regulation, and healthy study habits.

These recommendations advocate for a holistic, multi-level approach to tackling academic fatigue in Asian higher education. Isolated reforms or piecemeal interventions are insufficient; instead, a comprehensive reevaluation of how educational success is defined and pursued in the region is necessary. By combining research, policy, institutional practices, and student empowerment, higher education systems can create sustainable learning environments where academic achievement aligns with psychological well-being. Such reforms are vital for protecting students' health and ensuring that Asian universities remain resilient, globally competitive, and socially responsible in the years to come.

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