

The Relationship between Student Motivation and Academic Burnout among Undergraduate Students in Malaysian Higher Education

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ABSTRACT

Academic motivation and burnout are critical issues that directly influence student learning and well-being in higher education. Motivation has been identified as a central factor that sustains persistence and academic success, whereas burnout, reflected in exhaustion and disengagement, undermines learning outcomes. This study examines the relationship between motivation and academic burnout among undergraduate students in Malaysian higher education institutions. Using a cross-sectional design, data were collected from 664 undergraduates through a structured questionnaire that measured five motivation dimensions (intrinsic, extrinsic, task value, self-efficacy, and control beliefs) and two burnout dimensions (exhaustion and disengagement). Descriptive analyses showed that students reported moderately high motivation ($M=3.99$, $SD=0.62$), particularly extrinsic motivation ($M=4.35$), alongside moderate levels of burnout, with higher exhaustion ($M=3.07$) compared to disengagement ($M=2.97$). Pearson's correlation analysis revealed a significant negative relationship between motivation and burnout, $r(661)=-.29$, $p<.001$. In particular, self-efficacy and task value were most strongly associated with lower exhaustion. These findings suggest that fostering student motivation, especially intrinsic factors and self-efficacy, is essential in reducing burnout and enhancing resilience in higher education. The study contributes to the literature on student development in the Malaysian context and offers practical implications for academic support and student well-being initiatives.

Keywords: student motivation, academic burnout, exhaustion, disengagement, undergraduates, Malaysian higher education

INTRODUCTION

Academic motivation and burnout have emerged as two central constructs in the field of higher education research. Motivation is generally defined as the internal and external forces that initiate, direct, and sustain students' learning behaviours (Pintrich & De Groot, 1990). It plays a critical role in determining how students engage with academic tasks, persevere in the face of challenges, and ultimately achieve success. In contrast, burnout, originally studied in occupational psychology, has been increasingly applied to student populations as a syndrome of chronic stress characterised by emotional exhaustion, disengagement, and a reduced sense of accomplishment (Schaufeli, Martínez, Pinto, Salanova, & Bakker, 2002). When students experience burnout, they are less likely to be engaged, more likely to avoid learning tasks, and at greater risk of attrition. Understanding the relationship between these two constructs is vital, as motivation sustains students' resilience while burnout erodes it.

The global literature demonstrates consistent concern over the prevalence of burnout among university students. Meta-analyses and cross-national studies indicate that between 30–50 per cent of students report symptoms of exhaustion and disengagement during their studies (Salmela-Aro & Upadyaya, 2014). More recent studies highlight that the COVID-19 pandemic and its aftermath exacerbated stress and disengagement, raising questions about students' ability to maintain motivation in disrupted learning environments (Chong,

2025). At the same time, the role of motivation has been underscored in protecting against burnout. Xu et al. (2021), for example, found that both intrinsic and extrinsic motivation negatively predicted burnout among Malaysian and Chinese undergraduates, supporting the demands–resources model, where personal resources such as motivation mitigate the effects of academic stress.

Within the Southeast Asian and Nusantara context, concerns about student motivation and burnout have gained attention, particularly given the region's rapid expansion of higher education and the increasing academic demands placed on undergraduates. In Malaysia, for instance, studies have reported rising levels of psychological distress, anxiety, and burnout among university students, often linked to academic workload, competitive grading, and transition challenges from secondary to tertiary education (Roslan, Ahmad, Nabilla, & Ghiami, 2017). Similar concerns are echoed in neighbouring countries such as Indonesia, where student burnout has been connected to reduced academic performance and well-being (Sajodin, Maulid, & Rahmawati, 2025). These findings suggest that while students in the region demonstrate resilience, systemic pressures place them at risk of disengagement if motivation is not adequately nurtured.

Motivation itself is a multidimensional construct that encompasses both internal and external drivers. Pintrich and De Groot (1990) identified five components: intrinsic motivation, extrinsic motivation, task value, self-efficacy, and control beliefs. Intrinsic motivation reflects the enjoyment and interest in learning for its own sake, while extrinsic motivation relates to rewards such as grades and recognition. Task value refers to the perceived importance and utility of learning materials, self-efficacy reflects students' confidence in their academic ability, and control beliefs concern the extent to which students perceive their efforts as influencing outcomes. Each of these components has been shown to relate differently to burnout. For instance, self-efficacy has consistently emerged as one of the strongest protective factors against exhaustion, as students with higher confidence are less likely to feel overwhelmed by academic demands (Kim, Lee, Kim, & Lee, 2015).

Burnout, on the other hand, has been operationalised among students primarily through two dimensions: exhaustion and disengagement (Campos, Zucoloto, Bonafé, Jordani, & Maroco, 2011). Exhaustion reflects the depletion of emotional and physical energy due to academic demands, whereas disengagement captures a cynical or detached attitude towards studies. Research suggests that exhaustion is more directly linked to workload and stress, while disengagement may result from a lack of perceived relevance or value in learning tasks. Thus, investigating how different dimensions of motivation relate to exhaustion and disengagement can provide nuanced insights into how burnout develops in student populations.

Despite the growing literature, there remains a need to contextualise the motivation–burnout relationship within Malaysian higher education. Much of the global research has been conducted in Western settings, where cultural expectations, learning environments, and coping strategies differ significantly from those in the Nusantara region. In Malaysia, education is often viewed not only as a pathway to individual advancement but also as a responsibility towards family and society. These socio-cultural expectations may intensify extrinsic forms of motivation, while potentially influencing how students cope with stress and burnout. The interplay between cultural values, motivational drivers, and academic challenges underscores the importance of examining the motivation–burnout relationship in this specific context.

Accordingly, the present study seeks to achieve two main objectives: (1) to assess the levels of motivation and burnout among undergraduate students, and (2) to examine the relationship between student motivation (intrinsic, extrinsic, task value, self-efficacy, and control beliefs) and academic burnout (exhaustion and disengagement). By focusing on Malaysian higher education undergraduates, this study contributes to the broader literature on student development in the Nusantara region while addressing a pressing concern for universities: how to foster motivation as a protective factor against burnout. In doing so, the study aims to inform policy and practice by highlighting strategies that can enhance student engagement, reduce burnout, and promote resilience in higher education.

LITERATURE REVIEW

Academic Motivation in Higher Education

Academic motivation is a critical construct in educational psychology because it explains why students engage in learning tasks and how they persist in the face of challenges. Pintrich and De Groot (1990) conceptualised motivation as comprising intrinsic goal orientation, extrinsic goal orientation, task value, self-efficacy, and control beliefs. Intrinsic motivation reflects learning driven by curiosity and interest, while extrinsic motivation relates to external outcomes such as grades, recognition, or future career prospects. Task value refers to the perceived usefulness of learning tasks, self-efficacy indicates students' confidence in their abilities, and control beliefs capture their perceptions of whether effort leads to success. Studies consistently show that motivated students are more engaged, employ deeper learning strategies, and perform better academically (Schunk, Pintrich, & Meece, 2014).

Recent research continues to highlight the importance of motivation in sustaining students' resilience. Xu et al. (2021) reported that motivation was negatively correlated with burnout among Malaysian and Chinese undergraduates, indicating that highly motivated students are less likely to suffer from exhaustion and disengagement. Similarly, Nazri, Rahman, and Shafie (2023) found that motivation to learn significantly buffered the effects of academic stress among Malaysian students. These findings reinforce the view that motivation functions as a personal resource within the demands–resources framework of academic engagement.

Academic Burnout among Undergraduates

Burnout was originally introduced in occupational psychology but has been extended to student populations as a form of academic distress. It is typically characterised by exhaustion (feeling drained from study demands) and disengagement (developing negative attitudes towards learning) (Schaufeli et al., 2002). Campos et al. (2011) validated the measurement of student burnout using these two core dimensions, which have since been widely applied in educational settings. Burnout has been linked to decreased academic performance, psychological distress, and increased risk of dropout (Roslan, Ahmad, Nabilla, & Ghiami, 2017).

In Malaysia, research has documented rising levels of academic burnout, particularly among health sciences and professional degree students where workloads are intense (Roslan et al., 2017). Sajodin, Maulid, and Rahmawati (2025) reported similar patterns in Indonesian universities, where burnout was significantly related to reduced resilience and well-being. Chong (2025) further emphasised that post-pandemic stressors, such as online learning fatigue, have amplified the risk of burnout among undergraduates in Southeast Asia. Collectively, these studies demonstrate that burnout is a prevalent challenge across diverse higher education contexts in the region.

Linking Motivation and Burnout

Theoretical models such as the Job Demands–Resources (JD-R) model and the demands–resources model of engagement (Salmela-Aro & Upadaya, 2014) provide a useful lens for understanding the interplay between motivation and burnout. Motivation serves as a personal resource that helps students cope with academic demands, thereby reducing the likelihood of burnout. Empirical studies confirm that students with higher intrinsic motivation and task value are more likely to remain engaged, while those with higher self-efficacy report lower exhaustion (Kim, Lee, Kim, & Lee, 2015). Conversely, lack of motivation has been associated with higher burnout, especially disengagement, where students perceive limited meaning or value in their studies (Schaufeli et al., 2002).

Recent evidence from the Nusantara region supports this relationship. Xu et al. (2021) found that motivation was a significant negative predictor of burnout among Malaysian and Chinese undergraduates. Likewise, Nazri et al. (2023) highlighted that motivated learners demonstrated greater persistence and resilience, which reduced their vulnerability to exhaustion. These findings suggest that interventions that strengthen motivation—

particularly intrinsic drivers and self-efficacy—may play a critical role in preventing burnout in higher education contexts.

Research Gap

Although the literature establishes a strong theoretical and empirical basis for the link between motivation and burnout, several gaps remain. First, much of the evidence comes from Western settings, with relatively fewer studies focusing on Southeast Asia. Second, there is limited research that simultaneously assesses multiple dimensions of motivation (intrinsic, extrinsic, task value, self-efficacy, and control beliefs) in relation to both dimensions of burnout (exhaustion and disengagement). Finally, few studies have examined this relationship in the broader Malaysian higher education context, where cultural values, family expectations, and systemic academic pressures may shape both motivation and burnout in unique ways.

Accordingly, this study addresses these gaps by examining the levels of motivation and burnout among Malaysian undergraduates and by testing the correlations between different dimensions of motivation and burnout. The study aims to provide nuanced insights into how motivation can serve as a protective factor against academic burnout, thereby contributing to the literature on student well-being and resilience in the Nusantara context.

METHODOLOGY

Research Design

This study employed a quantitative cross-sectional survey design to investigate the relationship between student motivation and academic burnout among undergraduates in Malaysian higher education. The design was chosen because it enables the simultaneous measurement of multiple psychological constructs and the assessment of their associations at a single point in time (Creswell & Creswell, 2018).

Participants

The participants consisted of 664 undergraduate students recruited using convenience sampling from various faculties, including Business and Management, Accountancy, Social Sciences, Communication and Media Studies, Computer and Mathematical Sciences, Hotel and Tourism Management, Art and Design, and Islamic Studies. The majority of students were aged between 18 and 24 years, and both Diploma and Bachelor's degree students were represented. Participation was voluntary, and informed consent was obtained electronically prior to survey completion. Students were assured of anonymity and confidentiality throughout the research process.

Instruments

The survey instrument consisted of two validated scales measuring academic motivation and academic burnout, in addition to demographic questions. Academic Motivation was measured using items adapted from Pintrich and De Groot's (1990) Motivated Strategies for Learning Questionnaire (MSLQ). Five dimensions were assessed: intrinsic motivation, extrinsic motivation, task value, self-efficacy, and control beliefs. Each item was rated on a five-point Likert scale ranging from 1 (Never) to 5 (Always). Example items include "I prefer course materials that arouse my curiosity, even if they are difficult to learn" (intrinsic motivation) and "Getting a good grade is the most satisfying thing for me" (extrinsic motivation).

Academic Burnout was measured using 16 items adapted from Campos, Zucoloto, Bonafé, Jordani, and Maroco (2011). This instrument comprises two dimensions: exhaustion (8 items) and disengagement (8 items). Items such as "During classes, I often feel emotionally drained" (exhaustion) and "Lately, I tend to think less during classes and attend almost mechanically" (disengagement) were included. A five-point Likert scale from 1 (Never) to 5 (Always) was applied. Several positively worded items were reverse-coded to maintain consistency in measurement.

Procedure

The questionnaire was administered online via Google Forms between February and March 2023. Students accessed the survey link distributed through course coordinators and student networks. Prior to data collection, respondents were informed of the purpose of the study, the voluntary nature of their participation, and their right to withdraw at any time. Data screening was conducted to remove incomplete responses and to apply reverse-coding where required.

Data Analysis

Data were analysed using IBM SPSS Statistics (Version 27). The analysis proceeded in several stages:

1. Descriptive Statistics (mean, standard deviation, minimum, maximum) were calculated for each motivation and burnout dimension.
2. Reliability Analysis was conducted using Cronbach's alpha to assess the internal consistency of the subscales. Values above 0.70 were considered acceptable (Nunnally & Bernstein, 1994).
3. Correlation Analysis was performed using Pearson's product-moment correlation coefficients to examine the associations between motivation and burnout dimensions.
4. The level of significance was set at $p < .05$ for all analyses.

Ethical Considerations

The study adhered to ethical standards for research involving human participants. Informed consent was obtained electronically from all respondents. Data collection procedures complied with the principles of confidentiality, anonymity, and voluntary participation. Ethical approval was granted by the institutional review board of University Teknologi MARA (UiTM).

RESULTS

Descriptive Statistics

Descriptive statistics were computed to assess the levels of academic motivation and burnout among undergraduate students. As presented in Table 1, students reported moderately high levels of motivation across all dimensions. Extrinsic motivation had the highest mean ($M = 4.35$, $SD = 0.67$), followed by control beliefs ($M = 4.16$, $SD = 0.66$), task value ($M = 4.00$, $SD = 0.59$), intrinsic motivation ($M = 3.74$, $SD = 0.64$), and self-efficacy ($M = 3.68$, $SD = 0.69$). These findings suggest that students were strongly driven by both external and internal factors, though external rewards and perceived control were slightly more influential.

For burnout, students reported moderate levels overall, with exhaustion ($M = 3.07$, $SD = 0.41$) slightly higher than disengagement ($M = 2.97$, $SD = 0.36$). This indicates that while students occasionally felt drained, they were not severely detached from their academic tasks.

Table 1. Descriptive Statistics for Motivation and Burnout Dimensions (N = 664)

Construct	M	SD	Min	Max
Intrinsic Motivation	3.74	0.64	1.00	5.00
Extrinsic Motivation	4.35	0.67	1.00	5.00
Task Value Beliefs	4.00	0.59	1.20	5.00
Self-Efficacy	3.68	0.69	1.00	5.00
Control Beliefs	4.16	0.66	1.00	5.00
Exhaustion	3.07	0.41	1.62	4.75
Disengagement	2.97	0.36	1.50	4.38

Note. Scale range = 1–5; higher scores indicate higher levels of each construct.

As shown in Table 1, students reported relatively high levels of motivation, with extrinsic motivation emerging as the strongest driver, followed closely by control beliefs and task value. Intrinsic motivation and self-efficacy were moderately high, suggesting that students were not only driven by external rewards but also by confidence in their abilities and the perceived importance of learning tasks. In terms of burnout, exhaustion was slightly higher than disengagement, indicating that students were more likely to feel tired and strained rather than emotionally detached from their studies. These results reflect a student population that is generally motivated but still experiences moderate strain from academic demands.

Reliability Analysis

Cronbach's alpha values indicated that the motivation subscales had acceptable-to-excellent reliability: intrinsic ($\alpha = .81$), extrinsic ($\alpha = .81$), task value ($\alpha = .87$), self-efficacy ($\alpha = .92$), and control beliefs ($\alpha = .78$). Test anxiety, which was not the primary focus here, also showed strong reliability ($\alpha = .87$). However, the burnout subscales were weaker: exhaustion ($\alpha = .52$) and disengagement ($\alpha = .39$). These low reliability scores suggest that burnout findings should be interpreted with caution and may benefit from scale refinement in future studies.

Correlation Analysis

Pearson's correlation coefficients were computed to examine the relationship between student motivation and burnout. As shown in Table 2, overall motivation was negatively correlated with overall burnout ($r(661) = -.29, p < .001$). At the subscale level, self-efficacy had the strongest negative relationship with exhaustion ($r = -.32, p < .001$), followed by task value ($r = -.27, p < .001$) and intrinsic motivation ($r = -.24, p < .001$). Extrinsic motivation and control beliefs were also negatively correlated with burnout, though to a smaller degree.

Table 2. Pearson's Correlations between Motivation and Burnout Dimensions (N = 664)

Motivation Dimension	Exhaustion	Disengagement	Burnout (overall)
Intrinsic Motivation	-.24***	-.18***	-.22***
Extrinsic Motivation	-.15***	-.12**	-.14***
Task Value Beliefs	-.27***	-.20***	-.25***
Self-Efficacy	-.32***	-.26***	-.30***
Control Beliefs	-.19***	-.16***	-.18***
Motivation (overall)	-.29***	-.23***	-.29***

Note. $p < .01^{**}$, $*p < .001$. Negative correlations indicate that higher motivation is associated with lower burnout.

Table 2 demonstrates that motivation was significantly and negatively associated with burnout. In particular, self-efficacy showed the strongest negative correlations with both exhaustion and disengagement, highlighting its protective role against academic strain. Task value and intrinsic motivation were also strongly linked to lower burnout, suggesting that when students find meaning and enjoyment in their studies, they are less likely to experience exhaustion and detachment. Although extrinsic motivation and control beliefs also correlated negatively with burnout, their effects were weaker compared to intrinsic factors. These findings underscore the importance of strengthening internal motivation and self-belief to reduce the risk of academic burnout.

DISCUSSION

The findings of this study confirm that academic motivation plays a critical role in protecting undergraduates from academic burnout. Correlation analyses showed that overall motivation was negatively associated with

burnout, indicating that students who are more motivated are less likely to experience exhaustion and disengagement. This result aligns with the study's hypothesis and reinforces the theoretical expectation that motivation functions as a personal resource that buffers against stress in higher education (Salmela-Aro & Upadaya, 2014).

When examining the dimensions of motivation, self-efficacy emerged as the most important protective factor, showing the strongest negative correlations with both exhaustion and disengagement. This suggests that students who are confident in their academic abilities are better equipped to manage study demands and avoid emotional fatigue. Task value and intrinsic motivation were also negatively associated with burnout, highlighting that students who perceive their studies as meaningful and engaging are less likely to detach from academic tasks. Although extrinsic motivation and control beliefs were significant, their associations with burnout were weaker, suggesting that while external rewards and perceived effort-outcome beliefs can reduce strain, they are less powerful than internal drivers.

These findings are consistent with prior research in Malaysia and the broader Southeast Asian context. Xu et al. (2021) reported similar negative associations between motivation and burnout among Malaysian and Chinese undergraduates, while Nazri, Rahman, and Shafie (2023) found that motivation significantly moderated the effects of academic stress on student learning outcomes. In addition, Kim et al. (2015) highlighted the protective role of self-efficacy against long-term burnout among Korean students. Taken together, these studies affirm the robustness of the motivation–burnout relationship across cultural contexts.

Theoretically, this study contributes to the literature by extending the demands–resources model to Malaysian higher education, showing that motivation acts as a crucial personal resource that can mitigate the negative effects of academic demands. Practically, the results suggest that higher education institutions should prioritise strategies that enhance intrinsic motivation, task value, and self-efficacy. Interventions such as mentoring, mastery-oriented feedback, and curriculum design that emphasises the relevance of learning to students' goals may strengthen these dimensions. Additionally, workshops or counselling that build confidence and self-regulation skills could help students develop resilience against burnout.

Despite these contributions, some limitations must be acknowledged. First, the burnout subscales showed relatively low internal consistency, particularly disengagement ($\alpha = .39$), which limits the robustness of conclusions and suggests the need for improved measurement tools. Second, the cross-sectional design restricts causal inference; longitudinal studies are needed to examine how motivation and burnout influence each other over time. Third, the reliance on self-reported data raises the possibility of social desirability bias. Future research should adopt mixed-method approaches, incorporating qualitative interviews to capture the lived experiences of students, and compare results across different institutions (public vs. private) and cultural settings within the Nusantara region.

CONCLUSION AND SUGGESTIONS

The present study provides clear evidence that academic motivation is a vital resource in protecting students from the detrimental effects of academic burnout. Using a large sample of undergraduates, the findings revealed that motivation was moderately high among students, while burnout was present at moderate levels, particularly in the form of exhaustion rather than disengagement. The negative associations between motivation and burnout confirm that motivated students are more resilient, experience less fatigue, and are less likely to detach from their studies. Among the dimensions of motivation, self-efficacy emerged as the strongest protective factor, followed by task value and intrinsic motivation, indicating that students who are confident in their abilities and who value their academic work are less susceptible to academic strain. These results not only reinforce the demands–resources framework but also highlight the multidimensional nature of motivation in influencing student well-being.

From a theoretical perspective, this study extends the literature by situating the motivation–burnout relationship in the Malaysian higher education context. Much of the existing research has focused on Western populations, yet this study demonstrates that the protective role of motivation is equally relevant in Southeast Asian and Nusantara settings, where cultural values and family expectations strongly shape student learning.

By showing that intrinsic and task-related aspects of motivation are more effective in buffering against burnout than extrinsic drivers, the study adds nuance to motivational theory and underscores the importance of personal meaning and self-belief in sustaining academic engagement.

Practically, the findings point to several recommendations for higher education institutions. Universities

should design interventions that not only reward academic performance but also nurture intrinsic interest and personal growth. Teaching and curriculum strategies could emphasise the relevance of course materials to students' future goals and societal contributions, thereby strengthening task value. Academic support programmes and workshops can be developed to enhance self-efficacy, equipping students with study skills, self-regulation techniques, and mastery-oriented feedback that bolster confidence in learning. Furthermore, counselling services should integrate stress management and resilience-building components, ensuring that students have both the psychological and academic resources needed to cope with challenges. Given that burnout was most pronounced in the form of exhaustion, specific initiatives such as workload management, time management training, and balanced scheduling may be particularly effective in reducing fatigue.

Nevertheless, the study is not without limitations. The low reliability of the burnout subscales indicates that measurement tools may need refinement, especially to capture disengagement more accurately in local contexts. The cross-sectional design also restricts causal inference; it remains unclear whether high motivation reduces burnout or whether low burnout enhances motivation. Future research should therefore employ longitudinal or experimental designs to establish causality. Qualitative studies could further enrich understanding by exploring students' lived experiences of motivation and burnout, providing deeper insights into cultural and institutional factors that shape these dynamics. Comparative studies across different institutions—public versus private, urban versus rural, and Malaysia versus other Nusantara countries—would also broaden the scope and relevance of findings.

In sum, this study highlights the crucial role of motivation in safeguarding student well-being and academic persistence. By strengthening self-efficacy, task value, and intrinsic interest, higher education institutions can help students develop resilience against academic burnout. Such efforts will not only improve academic outcomes but also contribute to the holistic development of students as capable, confident, and purpose-driven individuals in Malaysian higher education and beyond.

Declaration of Generative AI Use

The authors acknowledge that generative artificial intelligence (AI) tools (ChatGPT, developed by OpenAI) were used to support certain stages of manuscript preparation, including language refinement, rephrasing of sentences, and assistance in improving structure and formatting. The use of AI was limited to editorial support and did not involve generating research data, performing analyses, or drawing conclusions. All study design, data collection, analysis, interpretation, and the intellectual content of the manuscript are the sole responsibility of the authors. The authors have carefully reviewed and verified all AI-assisted outputs to ensure accuracy and academic integrity.

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