

The Dynamics of Burnout and Academic Procrastination in Student Athletes

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ABSTRACT

Background: Student athletes face dual demands from academic responsibilities and intensive sports activities, which place them at higher risk of experiencing academic burnout and maladaptive learning behaviors such as academic procrastination. **Objective:** This study aimed to examine the relationship between academic procrastination and academic burnout among student athletes. **Method:** This study employed a quantitative non-experimental design involving 228 student athletes from a university in Surabaya, selected through purposive sampling. Data were collected using an online questionnaire distributed via WhatsApp, with all instruments measured on a five-point Likert scale. Data analysis was conducted using Spearman correlation and non-parametric tests with JASP statistical software. **Results:** The findings revealed a significant positive relationship between academic procrastination and academic burnout. Emotional exhaustion and cynicism were positively associated with academic procrastination, while academic efficacy showed a negative relationship. No significant differences were found based on gender. **Conclusion:** The results indicate that academic procrastination is closely related to burnout among student athletes and may function as a maladaptive response to prolonged academic and physical demands. These findings highlight the importance of academic and psychological support programs tailored to reduce burnout and improve self-regulation among student athletes.

Keywords: Academic burnout, Academic procrastination, Student

ABSTRAK

Latar Belakang: Mahasiswa atlet menghadapi tuntutan ganda berupa kewajiban akademik dan aktivitas olahraga yang intens, sehingga rentan mengalami burnout akademik dan perilaku prokrastinasi. **Tujuan:** Penelitian ini bertujuan untuk mengkaji hubungan antara prokrastinasi akademik dan burnout akademik pada mahasiswa atlet. **Metode:** Penelitian ini menggunakan pendekatan kuantitatif dengan desain non-eksperimental. Subjek penelitian terdiri dari 228 mahasiswa atlet yang dipilih menggunakan teknik purposive sampling. Pengumpulan data dilakukan secara daring melalui kuesioner berbasis Google Form yang disebarakan melalui WhatsApp, dengan skala Likert lima poin. Analisis data dilakukan menggunakan uji korelasi Spearman dan uji non-parametrik dengan bantuan perangkat lunak JASP. **Hasil:** Hasil penelitian menunjukkan adanya hubungan positif yang signifikan antara prokrastinasi akademik dan burnout akademik. Dimensi kelelahan emosional dan sinisme berhubungan positif dengan prokrastinasi akademik, sedangkan efektivitas akademik menunjukkan hubungan negatif. Tidak ditemukan perbedaan yang signifikan berdasarkan jenis kelamin. **Kesimpulan:** Temuan ini menegaskan bahwa prokrastinasi akademik berkaitan erat dengan burnout pada mahasiswa atlet dan dapat dipahami sebagai respons maladaptif terhadap tuntutan akademik dan olahraga yang berkelanjutan.

Kata Kunci: Burnout akademik, Prokrastinasi akademik, Mahasiswa atlet

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Introduction

An athlete can be defined as an individual who undergoes systematic training with the goal of achieving performance outcomes in competitive events (Budianto & Jannah, 2020). Within the context of higher education, many athletes also assume the role of university students. Data reported by *detik.com* indicate that 392 student athletes from 140 universities participated in the 2024 ASEAN University Games, illustrating that a considerable number of students are required to manage both academic and athletic responsibilities simultaneously. Unlike non-athlete students, student athletes are expected not only to meet academic demands—such as attending lectures, completing assignments, and maintaining academic achievement—but also to engage in intensive training programs and competitive preparation. These overlapping responsibilities place student athletes in a demanding dual-role position that may increase their risk of experiencing academic burnout.

Academic burnout is a psychological condition that has become increasingly prevalent among students who face continuous academic demands (Rohila et al., 2025). For student athletes, the experience of burnout tends to be more complex, as academic obligations are accompanied by persistent physical exertion and competitive pressure. Compared to non-athlete students, student athletes are exposed to double demands that continuously deplete both physical and psychological resources, making them more vulnerable to chronic fatigue and emotional exhaustion (Gustafsson et al., 2008; Xu et al., 2025). Under these conditions, academic tasks may become increasingly difficult to manage, leading student athletes to delay or avoid completing them.

Academic procrastination refers to the intentional and repeated postponement of academic tasks by diverting attention to activities that are more immediately enjoyable but less important, ultimately resulting in negative academic consequences (Qolbi et al., 2025). Previous studies have shown that students who experience emotional exhaustion, mental fatigue, and reduced academic motivation are more likely to procrastinate when initiating or completing academic work (Yunalia et al., 2023; Maulana & Syakarofath, 2025). Burnout diminishes students' capacity for self-regulation and persistence, causing academic demands to be perceived as burdensome and triggering avoidance behaviors in the form of procrastination.

Empirical evidence further suggests that academic burnout encourages students to rely on procrastination as a maladaptive coping strategy to temporarily relieve academic pressure. Although this strategy may reduce stress in the short term, it often leads to prolonged exposure to academic demands, accumulation of unfinished tasks, and intensified emotional exhaustion over time (Shamsali & Einipo, 2025; Sujadi & Ahmad, 2023). Fauziah (2016) also notes that internal factors, such as physical fatigue resulting from dominant non-academic activities, contribute to students' tendency to delay academic tasks. This pattern is frequently observed among student athletes, who tend to exhibit higher levels of task delay, absenteeism, and academic performance difficulties compared to their non-athlete peers (Ocal, 2016). In this sense, academic burnout can be understood not only as an outcome of excessive academic demands but also as a key predictor of academic procrastination.

Research by Nurzalinda and Hurriyati (2025) demonstrates a positive relationship between burnout and academic procrastination, indicating that individuals with higher levels of burnout are more likely to engage in task delay. Moreover, academic procrastination has been identified as a psychological mechanism that can further intensify burnout by increasing academic pressure, reducing learning engagement, and fostering feelings of inefficacy (Fathi et al., 2025). These findings suggest that burnout and procrastination are closely interconnected and may reinforce one another, particularly among student athletes who must navigate both academic and non-academic demands concurrently. Understanding this dynamic is essential for explaining the psychological vulnerability of student athletes in higher education settings.

Although academic burnout and procrastination have been widely studied among university students, research that specifically focuses on student athletes remains limited. Student athletes face distinctive challenges due to the simultaneous demands of academic responsibilities and intensive sports participation,

which may shape the burnout–procrastination relationship differently from that observed in non-athlete populations. Therefore, this study aims to examine academic burnout and academic procrastination among student athletes in greater depth. The findings are expected to contribute to the development of more context-sensitive academic and psychological support strategies that address the unique needs of student athletes.

Material and Method

This study used a quantitative, non-experimental correlational approach to explore the relationship between academic burnout and academic procrastination among student athletes. The non-experimental design was chosen because the study aimed to examine naturally occurring variables without manipulating conditions or applying experimental controls. Instead, the focus was placed on identifying the direction and strength of the relationship between burnout and procrastination based on empirical data.

Participants

A total of 228 student athletes from a university in Surabaya, Indonesia, participated in this study. Participants were recruited using purposive sampling to ensure that all respondents met specific inclusion criteria, namely being actively enrolled as university students while simultaneously participating in organized athletic activities. This approach was applied to capture individuals who experience concurrent academic and athletic demands in their daily lives.

Procedure

Data were collected through an online questionnaire distributed via WhatsApp. Before completing the questionnaire, participants were provided with information regarding the purpose of the study and were informed that their participation was entirely voluntary. Electronic informed consent was obtained prior to data collection. Throughout the research process, ethical principles were upheld, including the protection of participant confidentiality, anonymity, and the right to withdraw from the study at any stage without consequence.

Instruments

Academic burnout was assessed using the Maslach Burnout Inventory–Student Survey (MBI-SS), which measures three core dimensions: emotional exhaustion, cynicism, and academic efficacy. Academic procrastination was measured using a self-report scale designed to assess the tendency to delay academic tasks. All instruments were administered using a five-point Likert scale ranging from strongly disagree to strongly agree.

Psychometric evaluation indicated that the instruments used in this study were appropriate. Item validity was examined using item–total correlation analysis, and all items met the required validity criteria. Reliability analysis demonstrated acceptable internal consistency, with Cronbach’s alpha values exceeding the standard threshold of 0.70. These findings suggest that the instruments were both valid and reliable for measuring academic burnout and academic procrastination in this sample.

Data Analysis

Data analysis was conducted using JASP statistical software. Prior to hypothesis testing, assumption testing was performed. The Shapiro–Wilk test showed that the data did not meet the assumption of normality ($p < .001$). Consequently, non-parametric statistical methods were applied.

Shapiro-Wilk	p
0.871	< .001

The primary analysis employed Spearman’s rho correlation to examine the relationship between academic burnout and academic procrastination, as well as the associations between burnout dimensions and academic procrastination. In addition, the Mann–Whitney U test was used to analyze potential gender differences. Although regression analysis was initially considered, correlation-based analyses were ultimately selected to ensure consistency with the non-normal data distribution and the correlational nature of the study.

Result

a. Statistik Deskriptif

Tabel 1

Descriptive Statistics of Burnout and Academic Procrastination by Gender

Variable	Gender	M	SD	Min	Max	N
Burnout	Male	44.66	6.41	17.00	54.00	53
	Female	46.12	5.54	33.00	62.00	175
Academic Procrastination	Male	14.72	5.89	5.00	25.00	53
	Female	12.67	4.79	5.00	24.00	175

Note. N = number of participants; M = mean; SD = standard deviation

Based on the results of descriptive analysis, the number of participants in this study consisted of 21 male students and 114 female students. There was no missing data for either gender group or for the two variables studied, namely burnout and academic procrastination. For the burnout variable, male students obtained an average score of 43.38 with a standard deviation of 7.97. Meanwhile, female students showed a higher average burnout score of 46.08, accompanied by a smaller standard deviation of 5.48. These findings identify that, in general, the level of burnout is higher among female students than male students. In addition, the lower standard deviation in the female group indicates that the variation in burnout levels in this group is relatively more uniform. Burnout scores for male students ranged from 17 to 54, while those for female students ranged from 33 to 62.

On the academic procrastination variable, male students showed an average score of 13.95 with a standard deviation of 5.95. Meanwhile, female students had a slightly lower average of 12.92, with a standard deviation of 4.89. These findings indicate that academic procrastination behavior tends to be higher among male students than female students. In addition, the larger standard deviation in the male student group illustrates a wider range of procrastination behaviors within that group. The range of academic procrastination scores for male students was between 5 and 25, while for female students it ranged from 5 to 24.

In general, the findings of this study indicate gender differences in levels of fatigue and academic procrastination behavior. Female students tend to report higher levels of fatigue, while male students show a greater tendency toward academic procrastination. However, further inferential analysis is needed to determine whether these differences are statistically significant.

b. Correlation Test

Tabel 2

Spearman's Correlation Between Burnout and Academic Procrastination

Variable	1	2
1. Burnout	—	
2. Academic Procrastination	0.268***	—

Note. All correlations are one-tailed

*** $p < .001$

The research data shows a statistically significant and positive correlation between burnout and academic procrastination ($\rho = 0.268$, $p < .001$). These findings indicate that the higher the level of burnout experienced by students, the greater their tendency to procrastinate. The emotional exhaustion and academic pressure experienced by students have the potential to reduce their psychological energy and drive to complete academic tasks. These results support the theoretical idea that burnout is a factor that weakens students' self-regulation and motivation, causing them to procrastinate in their academic responsibilities.

Tabel 3

Spearman's Correlation Among Burnout Dimensions and Academic Procrastination

Variable	1	2	3	4
1. Exhaustion	—			
2. Cynicism	0.580***	—		
3. Academic Efficacy	- 0.276***	- 0.546***	—	
4. Academic Procrastination	0.384***	0.288***	- 0.228***	—

Note. All correlations are Spearman's rho, one-tailed

* $p < .05$, ** $p < .01$, *** $p < .001$

The results of the table above explain the correlation between each dimension of MBU-SS and academic procrastination. The results show a significant positive correlation ($\rho = 0.384$, $p < 0.001$) between emotional exhaustion and academic procrastination. This can be interpreted as meaning that the higher the level of emotional exhaustion experienced by student athletes, the greater their tendency to procrastinate on academic tasks. Similarly, cynical attitudes also show a positive relationship ($\rho = 0.288$, $p < 0.001$), indicating that student athletes who have cynical attitudes and emotional exhaustion towards their academic studies are more likely to delay academic tasks. Conversely, academic effectiveness showed a significant negative relationship with procrastination ($\rho = -0.228$, $p < 0.001$), meaning that the higher the students' confidence in their academic abilities, the lower their potential for procrastinating on academic tasks.

c. Independent Samples T-Test

Tabel 4

Mann-Whitney U Test for Burnout and Academic Procrastination by Gender

Variable	U	p
Burnout	4215.500	.315
Academic Procrastination	5562.000	.028

Note. Mann-Whitney U test used due to violation of normality assumptions

To determine whether there were differences in burnout and academic procrastination levels based on gender, the Mann-Whitney U test was conducted due to a violation of the normality assumption. The results of the analysis showed no statistically significant differences between male and female students, both in terms of burnout ($U = 991.500$, $p = 0.212$) and academic procrastination ($U = 1312.500$, $p = 0.484$). The findings indicate that gender is not a factor that influences the level of burnout or the tendency to procrastinate academically. Thus, both male and female students in this study showed equivalent levels of emotional exhaustion and academic procrastination. Furthermore, a Mann-Whitney U test was conducted to analyze gender differences in each dimension of the MBI-SS.

Tabel 5
Mann-Whitney U Test by Gender for Each Burnout Dimension

Dimension	U	p
Exhaustion	4537	.810
Cynicism	5395	.069
Academic Efficacy	3675	.021

Note. Mann-Whitney U test conducted to compare male and female student-athletes

Based on the results of the Mann-Whitney U test, there were no significant differences in the three dimensions of burnout when viewed from the perspective of gender. The p-values for each dimension indicate that male and female student athletes experienced relatively similar levels of burnout. These findings indicate that the emotional and psychological pressures arising from academic demands and sports activities are felt similarly by both gender groups, with no noticeable differences.

Discussion

The present study found a significant positive association between academic burnout and academic procrastination among student athletes. This finding suggests that student athletes who experience higher levels of academic fatigue tend to postpone academic tasks more frequently. This pattern is consistent with previous studies indicating that prolonged academic and psychological pressure reduces students' motivation and capacity to engage effectively in academic activities (Yunalia et al., 2023; Marchella et al., 2023). For student athletes, these effects may be intensified by the need to balance academic obligations with continuous physical training and competition demands.

The analysis of burnout dimensions further clarifies this relationship. Emotional exhaustion and cynicism were positively related to academic procrastination, indicating that students who feel mentally drained or emotionally detached from their studies are more likely to delay academic tasks. In contrast, academic efficacy showed a negative relationship with procrastination, suggesting that students who maintain confidence in their academic abilities are better able to resist task avoidance. These findings support the view that burnout undermines self-regulation and persistence, making procrastination a common response to overwhelming academic demands (Shamsali & Einipo, 2025; Sujadi & Ahmad, 2023).

Interestingly, the results also showed no significant differences in burnout or academic procrastination based on gender. This indicates that the psychological challenges associated with managing dual academic and athletic roles are experienced similarly by male and female student athletes. Rather than gender, situational pressures such as workload intensity, training schedules, and recovery limitations appear to play a more central role in shaping burnout and procrastination behaviors, as suggested by previous research on student athletes (Ocal, 2016).

Practical Implications for Sport and Health Psychology

From an applied perspective, these findings highlight the importance of viewing academic procrastination among student athletes as more than a simple time management issue. Procrastination may reflect deeper psychological strain related to academic burnout and accumulated physical fatigue. Therefore, sport and health psychology interventions should place greater emphasis on burnout prevention and recovery management.

Programs aimed at enhancing emotional regulation, strengthening academic efficacy, and supporting effective self-regulation may help student athletes manage academic demands more adaptively. In addition, coordination between coaches, academic advisors, and sport psychologists is essential to ensure that training demands and academic workloads are balanced. Creating a supportive environment that acknowledges the dual responsibilities of student athletes may reduce psychological strain and promote both academic engagement and overall well-being.

Study Limitations and Future Research

Several limitations of this study should be considered. First, the cross-sectional design limits conclusions about causal relationships between academic burnout and procrastination. Second, the use of self-report questionnaires may introduce response bias, as participants' answers could be influenced by personal perceptions or social desirability. Third, the sample was drawn from a single university, which may limit the generalizability of the findings to student athletes in different educational or sporting contexts.

Future research could address these limitations by employing longitudinal or experimental designs to better capture changes in burnout and procrastination over time. Expanding the sample across multiple institutions and incorporating additional variables, such as coping strategies or recovery quality, may also provide a more comprehensive understanding of academic adjustment among student athletes.

Conclusion

This study aims to examine the relationship between academic procrastination and academic burnout among student athletes. The findings demonstrate that academic procrastination is significantly and positively associated with burnout, indicating that student athletes who tend to delay academic tasks are more likely to experience higher levels of emotional exhaustion, cynicism, and reduced academic efficacy. These results confirm that burnout is not merely an outcome of academic demands, but is closely intertwined with maladaptive academic behaviors, particularly procrastination.

The results further highlight that emotional exhaustion and cynicism are positively related to academic procrastination, while academic efficacy shows a negative relationship, emphasizing the protective role of students' confidence in their academic abilities. Although descriptive differences based on gender are observed, inferential analyses indicate that burnout and academic procrastination are experienced relatively similarly by male and female

student athletes. This suggests that the dual demands of academic responsibilities and athletic commitments create comparable psychological pressures regardless of gender.

Theoretically, this study contributes to the literature by strengthening the understanding of burnout as a key psychological factor underlying academic procrastination, particularly in populations with dual roles such as student athletes. Practically, the findings underscore the importance of developing academic support and psychological intervention programs that focus on reducing burnout and improving time management, self-regulation, and recovery strategies for student athletes. Future research is recommended to employ longitudinal or experimental designs and to explore additional factors, such as coping strategies, motivation, and social support, to further clarify the causal mechanisms underlying the relationship between academic procrastination and burnout.

Author contribution statement

Rigan Ahmad Ubaidillah (A, C, D): Involved in study design, data analysis and preparation and final editing of manuscript for publication.

Wisnu Putra Airlangga (A, B, D): Involved in study design, data collection on and manuscript preparation. Emmanuel Etim Uye (B) : Final editing of manuscript for publication..

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