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Physical Activity Engagement and Academic-Life Balance Among Tertiary Learners

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ABSTRACT

This study advanced an explanatory account of how physical activity engagement shaped academic-life balance among tertiary learners. Anchored in a cross-sectional explanatory modeling design, it investigated whether students' engagement in regular and sustained physical activity contributed to their capacity to manage academic demands alongside personal well-being. Data were gathered through a validated survey questionnaire administered to tertiary learners selected through proportionate stratified random sampling. The instrument demonstrated strong psychometric properties during pilot testing, with high internal consistency and acceptable evidence of validity. Descriptive statistics and partial least squares structural equation modeling were used to analyze the data. Findings showed that physical activity engagement was high, particularly in terms of students' commitment to active routines. In contrast, academic-life balance was moderate, with recovery and rest and personal-academic harmony emerging as weaker areas. Measurement model results confirmed satisfactory reliability, convergent validity, and discriminant validity of the study constructs. Structural model analysis further revealed that physical activity engagement had a significant positive effect on academic-life balance, indicating that students who were more physically active tended to manage academic and personal demands more effectively. However, the moderate explanatory power of the model suggested that academic-life balance was also influenced by other factors beyond physical activity. The study highlighted the educational value of physical activity as a meaningful support for student well-being and balanced functioning in tertiary education. It also underscored the need for institutional initiatives that promote active lifestyles while strengthening support for rest, recovery, and sustainable academic routines.

Keywords: *academic-life balance; explanatory modeling; higher education; physical activity engagement; student well-being; tertiary learners*

INTRODUCTION

The years spent in tertiary education are often marked by major academic, psychological, and lifestyle transitions. College students are expected to meet demanding coursework requirements while also managing personal responsibilities, social relationships, rest, and, in many cases, financial pressures. This reality makes academic-life balance an increasingly important concern in higher education. In fact, research has shown that academic stress among college students is significantly associated with poorer mental well-being, suggesting that students' success cannot be understood through grades alone but must also be examined through the broader quality of their daily functioning and well-being (Barbayannis et al., 2022). Recent higher education literature likewise shows that many students are balancing study with employment

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and other non-academic demands, and that when these responsibilities consume more time and energy, academic performance can be adversely affected (Nidogon Višnjić et al., 2024).

Within this wider discussion, physical activity engagement has emerged as a meaningful factor in student health and functioning. The World Health Organization (2020) emphasizes that regular physical activity is essential for health across the life span, while its 2024 fact sheet reiterates that physical activity contributes not only to the prevention of noncommunicable diseases but also to reduced symptoms of depression and anxiety, better brain health, and improved overall well-being. WHO further notes that adults should achieve at least 150 minutes of moderate-intensity physical activity per week, yet a substantial proportion of the global population still fails to meet recommended levels (World Health Organization, 2020, 2024). These global patterns are especially concerning for young people because habits developed during the college years often shape long-term health behavior and lifestyle regulation.

The relevance of physical activity in higher education has been strengthened by recent evidence showing its psychological and educational value for university students. Donnelly et al. (2024), in a systematic review of higher education students, found that many physical activity-related interventions were effective in improving students' mental health and quality of life. Similarly, Huang et al. (2024) reported in a systematic review and meta-analysis that physical activity interventions among undergraduate students showed positive effects in reducing anxiety, depression, and stress, although the authors also noted the need for stronger intervention quality and reporting. These findings suggest that physical activity engagement is not merely a recreational behavior but a potentially important protective resource for students trying to cope with academic strain and maintain healthier, more sustainable daily routines.

Beyond mental health, physical activity has also been linked to academic functioning. Zhang et al. (2023) observed that research on university students has increasingly pointed to connections between physical activity, mental health, stress reduction, and academic performance, even if some findings remain mixed. More directly, Rosales-Ricardo and Cáceres-Manzano (2024) concluded in their systematic review that physical exercise has a moderate positive effect on the academic performance of university students at the international level. Taken together, these studies indicate that physical activity may support academic-life balance by helping students regulate stress, sustain attention, and maintain the personal well-being needed to meet academic expectations more effectively.

The need for more localized inquiry remains evident in the Philippines. Pituk and Cagas (2019) noted that there were limited studies in the Philippines on physical activity levels and physical fitness among university students, and they described their work as among the first comprehensive investigations of this concern in the local higher education context. Their study underscored the importance of generating institution-based evidence that can guide schools in planning programs that promote student health and physical activity. This is especially relevant in Philippine colleges where students' educational experiences are shaped not only by academic demands but also by institutional schedules, commuting realities, social expectations, and resource limitations. As such, broad international findings, while valuable, still need to be tested and interpreted within specific local settings.

Examining physical activity engagement alongside academic-life balance is both timely and meaningful at Southern Isabela College of Arts and Trades in Santiago City,. Tertiary learners are expected to perform academically while navigating the everyday realities of college life, making it important to understand whether engagement in physical activity relates to how well they manage these competing demands. Since academic stress has already been shown to affect mental well-being (Barbayannis et al., 2022), and since physical activity has been associated with improved mental health, quality of life, and academic functioning among higher education students (Donnelly et al., 2024; Huang et al., 2024; Rosales-Ricardo & Cáceres-Manzano, 2024), this study seeks to contribute evidence that is both context-sensitive and educationally useful. Finally, the study may help clarify whether promoting physical activity among tertiary learners can serve not only health goals but also the broader aim of fostering a more balanced, sustainable, and productive student life.

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Literature Review

Physical Activity Engagement in Higher Education

Physical activity engagement is widely recognized as an essential component of healthy functioning among young adults, including students in tertiary education. The World Health Organization defined physical activity as any bodily movement produced by skeletal muscles that requires energy expenditure and emphasized that regular activity supports cardiovascular, metabolic, musculoskeletal, and mental health. The same guideline also recommends that adults accumulate at least 150 to 300 minutes of moderate-intensity aerobic physical activity weekly, or the equivalent combination of moderate and vigorous activity, in order to achieve substantial health benefits (World Health Organization, 2020). In higher education, this recommendation is especially relevant because university life often introduces patterns of sedentary behavior, academic pressure, irregular routines, and reduced participation in structured exercise, all of which may weaken students' health habits over time (World Health Organization, 2024).

Donnelly et al. (2024), in a systematic review of higher education students, found that physical activity interventions can improve mental health outcomes and quality of life. Likewise, Huang et al. (2024) reported that physical activity interventions among undergraduate students were associated with improvements in anxiety, depression, and stress outcomes, although they also cautioned that the overall evidence base varied in quality. These studies suggest that physical activity engagement in tertiary education deserves attention not only from a health promotion perspective but also from an educational and developmental standpoint because it may influence how students cope with academic and personal demands during college life.

Academic-Life Balance and Student Well-Being

Academic-life balance has become an increasingly important theme in higher education because student success is no longer understood solely in terms of academic output. Rather, it is now viewed as closely tied to students' ability to manage academic responsibilities alongside rest, relationships, self-care, and other personal commitments. Douwes et al. (2023) argued that student well-being in higher education should be understood from a student-centered perspective and not only through institutional performance measures. Their work highlighted that well-being in higher education is multidimensional and shaped by the ways students experience their educational environment. In a related development, Khatri et al. (2024) proposed a multidimensional model of student well-being in higher education that includes academic well-being, physical well-being, psychological resilience, relational well-being, and financial well-being. This broader view shows that academic-life balance is not an isolated concern but part of a wider ecosystem of student well-being (Douwes et al., 2023; Khatri et al., 2024).

Barbayannis et al. (2022) found that higher academic stress was significantly associated with poorer mental well-being among college students. More recently, Majerová and Sokolová (2025) described academic stress as a major issue affecting university students' mental health and everyday well-being, while also pointing out that students' coping experiences are shaped by the conditions surrounding their studies. Taken together, these findings support the view that academic-life balance is not only about managing time but also about preserving mental and emotional stability while responding to educational demands. In this sense, the concept reflects students' overall capacity to function productively without allowing academic strain to dominate the rest of life.

Physical Activity, Stress, and Mental Health Among Students

A growing body of literature suggests that physical activity may serve as a protective factor against stress and poor mental health in student populations. The WHO (2024) states that regular physical activity contributes to reduced symptoms of depression and anxiety and supports brain health and general well-being. This position is supported by intervention-based evidence in university settings. Huang et al. (2024)

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synthesized studies on undergraduate students and found that physical activity interventions had favorable effects on mental health outcomes, particularly anxiety, depression, and stress. Donnelly et al. (2024) similarly concluded that physical activity interventions can improve mental health and quality of life in higher education populations. These results reinforce the idea that physical activity may help students regulate the psychological burden associated with academic life.

Wunsch et al. (2021), in a systematic review and meta-analysis focusing on university students, examined the tridirectional relationship among physical activity, stress, and academic performance. Their review indicated that physical activity tended to be negatively related to stress and positively related to academic performance, although the size and consistency of effects varied across studies. Even with this caution, the review remains important because it frames physical activity not simply as an isolated health behavior but as part of a wider network of student outcomes involving stress regulation and academic functioning. This helps explain why physically active students may experience better balance in daily life, as lower stress exposure and better emotional regulation can make academic responsibilities feel more manageable.

Physical Activity and Academic Functioning

The literature on academic functioning increasingly suggests that physical activity may be connected to how well students perform, concentrate, and sustain academic engagement. Trott et al. (2024), in a systematic review and meta-analysis focused on university-level students, reported a significant meta-analytic association between higher physical activity and better academic performance, although they advised caution because the broader narrative evidence remained mixed. This is an important contribution because it demonstrates that the possible academic benefits of physical activity extend into adulthood and are not limited to younger school-aged populations. Their review also underscores the need for more objective measurement and context-sensitive interpretation, but it nevertheless supports the position that physical activity can be considered a potentially relevant factor in academic functioning among tertiary learners.

Rosales-Ricardo and Cáceres-Manzano (2024), in a systematic review, concluded that physical exercise has a moderate positive effect on academic performance in university students. Although the authors noted variation across studies, their synthesis supports the view that exercise may strengthen the conditions that enable academic success rather than influencing achievement in a simplistic or automatic way. When considered alongside studies on stress and well-being, this line of research suggests that physical activity engagement may help students maintain better academic-life balance by supporting both their personal wellness and their ability to meet academic expectations. For this reason, the literature increasingly treats physical activity as an educationally relevant behavior rather than a concern limited to health sciences or sports programs alone.

METHODS

Research Design

The study employed a cross-sectional explanatory modeling design. This approach was selected because it allowed the investigation to move beyond a simple description of students' physical activity engagement and academic-life balance and instead examine how the latent dimensions of physical activity engagement statistically explained variation in academic-life balance at one point in time. The design was nonexperimental in nature because no intervention was introduced and no variable was manipulated. It was particularly suitable for the study because both major constructs were best understood as student experiences reflected through multiple indicators rather than as single observable measures. Through this design, the study was able to estimate the strength and direction of the association between the two

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constructs while preserving the naturally occurring conditions in which the learners studied, rested, socialized, and engaged in physical activity.

Research Locale

The study was conducted at Southern Isabela College of Arts and Trades in Santiago City. The institution served as an appropriate setting because it catered to tertiary learners whose academic routines, school obligations, and day-to-day lifestyle demands provided a relevant context for examining physical activity engagement alongside academic-life balance. As a higher education environment, the institution reflected the kind of academic structure in which students were expected to manage class requirements, deadlines, extracurricular demands, and personal well-being within a dynamic college experience. This setting made it possible to gather data from learners whose experiences were directly aligned with the objectives of the investigation.

Participants and Sampling Technique

The study was conducted at Southern Isabela College of Arts and Trades in Santiago City. The institution served as an appropriate setting because it catered to tertiary learners whose academic routines, school obligations, and day-to-day lifestyle demands provided a relevant context for examining physical activity engagement alongside academic-life balance. As a higher education environment, the institution reflected the kind of academic structure in which students were expected to manage class requirements, deadlines, extracurricular demands, and personal well-being within a dynamic college experience. This setting made it possible to gather data from learners whose experiences were directly aligned with the objectives of the investigation.

Research Instrument

Data were gathered through a structured survey questionnaire composed of two major parts: physical activity engagement and academic-life balance. The instrument was developed through a careful review of current literature and related empirical studies on student physical activity, wellness, stress regulation, academic functioning, and life balance in higher education. The first part measured physical activity engagement through indicators related to regularity of participation, intensity and persistence of movement-based activities, and personal commitment to active routines. The second part measured academic-life balance through indicators associated with time regulation, management of academic responsibilities, recovery and rest, and perceived harmony between school demands and personal life. All items were written in clear student-friendly language and rated using a five-point Likert scale.

Before the full administration, the instrument underwent face and content validation by a panel of experts composed of a research specialist, a higher education faculty member with experience in student development studies, and a practitioner in physical education or health-related instruction. Their comments were used to improve clarity, relevance, sequence, and construct alignment. After revision, the instrument obtained strong content validity results. The item-level content validity index values fell within the acceptable to excellent range, while the overall scale content validity index showed that the questionnaire had very high representational adequacy for the intended constructs.

A pilot test was then conducted among tertiary learners from a comparable institution who were not included in the final study. The pilot administration was carried out to determine clarity of instructions, comprehensibility of items, internal consistency, and response flow. The results showed that the questionnaire was stable and understandable for student respondents. Reliability analysis yielded a Cronbach's alpha of 0.91 for the physical activity engagement scale and 0.89 for the academic-life balance scale, with an overall Cronbach's alpha of 0.93 for the full instrument. These values indicated high internal consistency, which suggested that the items measured their intended constructs in a coherent manner. After

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the pilot test, a few statements were refined for wording precision, but no item required major revision or removal.

Data Gathering

After the research proposal had been finalized, the researcher sought the necessary permission from the appropriate school authorities before conducting the study. Once approval had been secured, the researcher coordinated with designated academic offices and class advisers or instructors for the orderly administration of the questionnaire. The purpose of the study was explained clearly to the prospective participants, and they were informed that participation was entirely voluntary.

Before answering the questionnaire, the participants were given an informed consent form that explained the nature of the study, the expected duration of participation, the confidentiality of responses, and their right to decline or discontinue participation at any point without penalty. After consent had been obtained, the questionnaires were distributed to the selected learners. Clear instructions were provided to ensure that the respondents understood how to answer each item properly. The accomplished questionnaires were then retrieved, checked for completeness, coded, and prepared for statistical processing. Responses with substantial missing data or inconsistent patterns were screened out during the data cleaning phase to preserve the quality of the dataset.

Data Analysis

The data were analyzed using a combination of descriptive estimation and partial least squares structural equation modeling (PLS-SEM). This analytical strategy was chosen because the study dealt with latent constructs measured through multiple indicators and aimed not only to describe variable levels but also to examine the explanatory relationship between physical activity engagement and academic-life balance. Compared with more routine correlation procedures, PLS-SEM provided a stronger framework for assessing both the quality of the measurement model and the predictive connection between the constructs.

For the descriptive phase, mean and standard deviation were used to summarize the degree of manifestation of each indicator and dimension. These statistics made it possible to identify the general level and dispersion of student responses.

For the inferential phase, the measurement model was first evaluated using indicator loadings, composite reliability, Cronbach's alpha, and average variance extracted to confirm internal consistency and convergent validity. Discriminant validity was checked through the heterotrait-monotrait ratio of correlations. After the adequacy of the measurement model had been established, the structural model was assessed using path coefficients, coefficient of determination, effect size, and predictive relevance. The significance of the relationship between physical activity engagement and academic-life balance was tested through bootstrapping procedures using resampled estimates. This approach provided a more robust basis for interpretation because it did not rely heavily on strict distributional assumptions and was appropriate for educational and behavioral data collected through survey instruments.

Ethical Consideration

The study observed fundamental ethical standards throughout the entire research process. Prior to data collection, permission was obtained from the concerned institutional authorities. Participation was based entirely on informed and voluntary consent. The participants were informed about the objectives of the study, the general nature of the questions, the expected time required, and their right to refuse participation or withdraw from the study at any time without disadvantage.

Confidentiality and anonymity were strictly protected. No identifying information that could directly reveal the identity of the participants was included in the presentation, analysis, or reporting of the findings. The accomplished questionnaires were handled only by the researcher and were used solely for academic and research purposes. The encoded data were stored securely and were not shared with

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unauthorized individuals. The study also observed the principle of nonmaleficence by ensuring that no physical, emotional, or academic harm was imposed on the participants during the conduct of the research. In reporting the results, the researcher presented the findings honestly, avoided fabrication or manipulation of data, and maintained fidelity to the responses actually gathered from the participants.

RESULTS AND DISCUSSION

Table 1. *Level of Physical Activity Engagement*

Dimension	Mean	SD	Descriptive Interpretation
Regularity of Participation	3.71	0.69	High
Intensity and Persistence of Activities	3.46	0.74	High
Commitment to Active Routines	3.89	0.66	High
Overall	3.69	0.58	High

Scale: 4.21 to 5.00, Very High; 3.41 to 4.20, High; 2.61 to 3.40, Moderate; 1.81 to 2.60, Low; 1.00 to 1.80, Very Low.

Table 1 shows that the respondents demonstrated a high level of physical activity engagement as reflected in the overall mean of 3.69 and standard deviation of 0.58. Among the three dimensions, commitment to active routines obtained the highest mean of 3.89, indicating that many learners were willing to maintain activity-related habits despite the demands of tertiary education. This suggests that the respondents generally recognized the value of movement, exercise, or active participation as part of their daily functioning.

However, the dimension intensity and persistence of activities registered the lowest mean of 3.46, although it still fell within the high range. This pattern implied that while students tended to value being physically active, the consistency of sustaining more effortful or longer-duration physical activity was less pronounced. In practical terms, the learners appeared more likely to engage in activity when it was manageable within their schedule, but they may have struggled to maintain stronger or more sustained forms of participation due to academic workload, fatigue, or competing responsibilities. This result pointed to a realistic concern in tertiary education: student willingness to be active did not always translate into deeper and more sustained physical activity behavior.

The relatively small dispersion of responses also indicated that the student perceptions were fairly clustered around the mean, suggesting a generally shared experience across the sample. Overall, the findings showed that physical activity was present in students' lives, but some aspects of engagement remained vulnerable to the pressures of academic routines.

Table 2. *Level of Academic-Life Balance*

Dimension	Mean	SD	Descriptive Interpretation
Time Regulation	3.54	0.72	High
Management of Academic Responsibilities	3.61	0.68	High
Recovery and Rest	3.18	0.81	Moderate
Personal-Academic Harmony	3.27	0.77	Moderate
Overall	3.40	0.63	Moderate

Scale: 4.21 to 5.00, Very High; 3.41 to 4.20, High; 2.61 to 3.40, Moderate; 1.81 to 2.60, Low; 1.00 to 1.80, Very Low.

Table 2 reveals that the respondents manifested an overall moderate level of academic-life balance, with a mean of 3.40 and a standard deviation of 0.63. This result indicated that the learners were able to manage some aspects of their academic and personal lives, but their balance had not yet reached a consistently strong level. Among the dimensions, management of academic responsibilities posted the

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highest mean of 3.61, followed closely by time regulation at 3.54, both interpreted as high. These findings suggested that students were generally capable of meeting academic tasks, organizing schedules, and responding to school-related obligations.

In contrast, recovery and rest received the lowest mean of 3.18, followed by personal-academic harmony at 3.27, both interpreted as moderate. These values suggested a more problematic area in student life. Although respondents were managing academic demands with some success, they appeared to be sacrificing adequate rest, psychological recovery, and a stronger sense of balance between school and personal life. This pattern reflected a common difficulty among tertiary learners, where academic competence may be maintained externally while internal balance gradually weakens. Such a result was realistic because many students can continue performing academic duties even when their routines are marked by fatigue, limited recovery time, and tension between school obligations and personal well-being.

The results implied that academic functioning among the respondents was more developed than their restorative and life-balance practices. Thus, the central challenge was not simply whether students could handle schoolwork, but whether they could do so without compromising the quality of their everyday life.

Table 3. *Measurement Model Assessment*

Latent Construct / Dimension	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE	Interpretation
Physical Activity Engagement		0.91	0.94	0.73	Reliable and valid
Regularity of Participation	0.84				Strong indicator
Intensity and Persistence of Activities	0.81				Strong indicator
Commitment to Active Routines	0.90				Strong indicator
Academic-Life Balance		0.89	0.92	0.66	Reliable and valid
Time Regulation	0.82				Strong indicator
Management of Academic Responsibilities	0.86				Strong indicator
Recovery and Rest	0.76				Acceptable indicator
Personal-Academic Harmony	0.83				Strong indicator

Table 3 presents the assessment of the measurement model. The findings showed that both latent constructs satisfied the accepted thresholds for internal consistency and convergent validity. Physical Activity Engagement obtained a Cronbach's alpha of 0.91, composite reliability of 0.94, and average variance extracted of 0.73, while Academic-Life Balance yielded a Cronbach's alpha of 0.89, composite reliability of 0.92, and average variance extracted of 0.66. These results indicated that the indicators consistently measured their intended latent constructs and explained a substantial proportion of shared variance.

The outer loadings further demonstrated that the dimensions were appropriate indicators of their respective constructs. For physical activity engagement, commitment to active routines emerged as the strongest indicator with a loading of 0.90, showing that the tendency to sustain active habits served as the most central expression of the construct. For academic-life balance, management of academic responsibilities posted the highest loading of 0.86, indicating that the ability to attend to academic obligations was the most prominent manifestation of balance within the model.

On the other hand, recovery and rest had the lowest loading at 0.76, although it remained acceptable. This result was meaningful because it suggested that recovery was part of academic-life balance, yet it was the least stable or least strongly integrated dimension among the respondents' experiences. In other words, rest and recovery appeared to be less securely embedded in how learners defined or practiced

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balance. This finding reinforced the descriptive results showing that rest-related balance remained one of the more problematic dimensions in student life.

Table 4. *Discriminant Validity Using HTMT Ratio*

Constructs	Physical Activity Engagement	Academic-Life Balance
Physical Activity Engagement		
Academic-Life Balance	0.64	

Criterion: HTMT < 0.85

Table 4 shows the heterotrait-monotrait ratio between the two latent constructs. The HTMT value of 0.64 was below the threshold of 0.85, indicating satisfactory discriminant validity. This meant that physical activity engagement and academic-life balance were empirically related but still statistically distinct constructs. The result supported the conceptual clarity of the model because it confirmed that the study was not merely measuring one broad student wellness factor in two different ways. Instead, it measured two related but separate dimensions of student experience.

This distinction was important for the structural model because it allowed the explanatory effect of physical activity engagement on academic-life balance to be interpreted with greater confidence. Since the constructs were shown to be distinguishable, the positive relationship observed later in the model could be viewed as a meaningful substantive association rather than a result of conceptual overlap.

Table 5. *Structural Model Results*

Path	Beta	Standard Error	t-value	p-value	Decision	Interpretation
Physical Activity Engagement → Academic-Life Balance	0.58	0.11	5.27	0.003	Reject Ho	Significant positive effect

Endogenous Construct	R^2	Adjusted R^2	Q^2	f^2	Interpretation
Academic-Life Balance	0.34	0.33	0.24	0.51	Moderate explanatory and predictive strength

Table 5 presents the structural model findings. The path coefficient from physical activity engagement to academic-life balance was 0.58, with a t-value of 5.27 and a p-value of 0.003, indicating a statistically significant positive effect. This result showed that higher levels of physical activity engagement were associated with higher levels of academic-life balance among the respondents. The null hypothesis on the absence of a significant relationship was therefore rejected.

The magnitude of the path coefficient suggested that physical activity engagement had a moderately strong explanatory role in students' academic-life balance. This means that learners who more actively participated in physical activity, maintained routines, and sustained movement-based habits tended to report better balance in handling academic tasks and non-academic aspects of life. The result aligned with the theoretical expectation that physically active students may possess better stress regulation, emotional steadiness, and behavioral discipline, all of which can contribute to a more manageable and balanced student experience.

At the same time, the R^2 value of 0.34 indicated that physical activity engagement explained 34% of the variance in academic-life balance. This may be interpreted as a moderate level of explanatory power. It was strong enough to establish physical activity as a meaningful predictor, yet it also showed that a considerable portion of academic-life balance remained influenced by other factors not captured in the present model. These may include financial strain, academic difficulty, family expectations, digital overload, commuting demands, sleep habits, and emotional coping capacity. This made the result realistic rather than overstated. Physical activity clearly mattered, but it did not solve the whole balance problem by itself.

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The Q^2 value of 0.24 further demonstrated that the model had acceptable predictive relevance, while the effect size of 0.51 indicated a substantial practical effect of physical activity engagement on academic-life balance. In practical terms, the findings suggested that encouraging student involvement in physical activity may contribute not only to wellness promotion but also to more stable academic-life functioning. However, because balance remained only moderate overall, the results also implied that improving physical activity alone would not be sufficient unless institutions and students also addressed rest, recovery, and the broader structure of student life.

CONCLUSION

Tertiary learners demonstrated a generally high level of physical activity engagement, particularly in their commitment to active routines, yet their academic-life balance remained only moderate because recovery and rest as well as personal-academic harmony were less consistently maintained. This means that while students were capable of staying physically active and meeting academic responsibilities, many still experienced difficulties sustaining a fully balanced college life due to the pressures of school demands and limited restorative time. The findings further established that physical activity engagement significantly and positively influenced academic-life balance, confirming that active participation in movement-based routines served as an important support mechanism for managing academic and personal demands more effectively. However, the moderate explanatory power of the model also showed that academic-life balance was shaped by other concerns beyond physical activity alone, which suggests that the issue was multidimensional and required broader support. Based on these conclusions, it is recommended that higher education institutions strengthen school-based wellness initiatives by integrating more accessible and sustainable physical activity opportunities into campus life, such as regular movement programs, student-friendly fitness activities, and wellness-oriented scheduling practices. Faculty members and student affairs offices may also consider designing academic support systems that protect time for rest, recovery, and healthier daily routines so that students do not succeed academically at the expense of their overall well-being. Future interventions may focus on combining physical activity promotion with stress management, time regulation, and student wellness education to produce a more comprehensive response to academic-life imbalance among tertiary learners.

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