

The Relationship between Mental Health, Healthy Lifestyle Behaviours, and Achievement Motivation on Academic Performance of College Students in Solo Raya

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Abstract

Research aims: This research investigates how mental health, lifestyle habits, and motivational drives toward academic success are interconnected with the academic outcomes of university students in the Solo Raya region.

Design/Methodology/Approach: A sample of 246 students from Raden Mas Said State Islamic University of Surakarta, Sebelas Maret University, and

Muhammadiyah University of Surakarta was selected using cluster random sampling, with data analyzed using Smart PLS 3.

Research findings: The results indicate an R-squared value of 79.4%. Mental health is positively and significantly related to students' academic performance. Healthy lifestyle behaviors are also positively and significantly associated with academic performance. Furthermore, achievement motivation has a positive and significant influence on students' academic performance.

Theoretical Contribution/Originality: This study emphasizes the importance of academic success and suggests that mental health, lifestyle habits, and motivational drives are critical factors influencing students' academic outcomes. By exploring these variables within the context of university students in Solo Raya, this research provides insights that challenge conventional approaches to understanding academic performance.

Practical/Policy/Social Implications: The study recommends that universities implement programs to support the development of achievement motivation, such as motivational seminars, counseling, and mental health support. These programs can assist students in overcoming obstacles, focusing on goals, and enhancing academic performance.

Research Limitations/Implications: Future research should expand the coverage area in Solo Raya, as the current study only includes three major campuses, which limits the generalization of the findings. Involving more institutions will allow for the identification of other factors that comprehensively influence students' academic performance and provide a holistic view of the challenges and opportunities faced, thereby increasing the relevance of the results in the educational context of the region.

Keywords: *Achievement Motivation, Healthy Lifestyle Behaviors, Mental Health, Academic Performance*

INTRODUCTION

Education serves as a primary catalyst in improving social and economic well-being, with academic success measured through GPA and graduation rates (Kassaw and Demareva, 2023). Personal factors such as a healthy lifestyle and learning motivation also play a significant role. Chu et al., (2023) found that a healthy lifestyle mediates the relationship between mental health and academic performance, with achievement motivation enhancing self-efficacy and academic abilities (X. Li et al., 2022). Achievement motivation is a key driver of behavior toward accomplishment, encompassing beliefs, values, and goals that determine academic success (Steinmayr *et al.*, 2019). In a study by Moyano et al., (2020) Montero and Alonso categorized motivation into learning, outcomes, and fear of failure. Learning and outcome motivations drive effort, while fear hinders students' abilities. Intrinsic motivation is more closely linked to academic achievement than outcome-based motivation. Additionally, mental well-being is also crucial in education. Dekker et al., (2020) emphasize that a lack of self-control and clear goals negatively impacts students' mental health.

Mental health issues among university students are on the rise, with 12%–46% experiencing psychological distress (Chu *et al.*, 2023). Caesaria et al., (2024) cite UNICEF data from 2021 showing that adolescents aged 10–19 are particularly vulnerable to anxiety disorders. According to data from the 2018 Basic Health Research (Risikesdas), more than 19 million individuals aged 15–24 have mental emotional disorders, while more than 12 million people suffer from depression. Zada et al., (2021) emphasize that mental health problems often begin in youth and persist into adulthood. BRIN, (2023) cites data from the World Health Organization (WHO), reporting that around 46.33% of 2,112 suicide cases in Indonesia between 2012–2023 occurred among adolescents. These findings emphasize the importance of expanding access to more equitable mental health services for university students, as an urgent effort to meet their needs. Mental health has been shown to substantially influence academic outcomes. In addition, previous research emphasizes that adopting a healthy lifestyle improves cognitive function, thereby supporting improved educational performance, with a healthy lifestyle also playing a key role in preventing illness and managing stress, which positively impacts academic performance and improves Grade Point Average (GPA) (Berhanu and Shiferaw, 2023; Mahfouz *et al.*, 2024). Ong et al., (2021) identify that academic success opens up job opportunities, increases salaries, and enhances students' work efficiency.

There is a gap in this research. Chu et al., (2023) mentioned a significant relationship between mental health and academic performance, even after adjusting for healthy lifestyle behaviours. Zada et al., (2021) and Abdullah et al., (2022) also reported a positive correlation between mental health and students' academic performance. Jian, (2022) revealed the influence of academic motivation on student engagement and achievement. Achievement motivation plays a crucial role in academic performance (Li, Pu and Phakdeephrot, 2022; Yukhymenko-Lescroart, 2023). These findings clearly contradict earlier studies that reported no significant relationship between mental health, lifestyle, achievement motivation, and academic performance. Liu et al., (2023) noted that the reciprocity between motivation and achievement is harder to comprehend, existing only as a unilateral effect (from achievement to educational outcomes). Furthermore, studies by Maniaci et al., (2023) and Cai

et al., (2021) indicated no correlation between mental health, healthy lifestyle behaviours, and students' academic performance.

This study seeks to fill the knowledge gap regarding the relationship between mental health, healthy lifestyle, and achievement motivation on students' academic achievement in the Greater Solo area. X. Li et al., (2022) found a correlation between achievement motivation and both student performance and employability. Balanced mental health, combined with support from the government and educators, can reduce academic failure and improve behavioral strategies (Zada et al., 2021). Chu et al., (2023) the study also found a link between mental health, healthy lifestyle and academic achievement. Achievement motivation plays an important role in helping students set goals, work hard and remain persistent when facing academic challenges. Good mental health supports this motivation by managing stress and maintaining focus. A healthy lifestyle, including regular exercise and consistent sleep patterns, enhances stamina and learning capacity. This study aims to provide insights for students, institutions, and mental health practitioners in developing policies and programs that improve achievement motivation and academic performance in Solo Raya, serving as a foundation for effective self-management strategies and interventions to enhance student academic outcomes.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Conservation of Resources (COR) Theory

The Conservation of Resources (COR) theory by Hobfoll, (1989) posits that individuals value resources that support their lives, such as material assets, supportive conditions, skills, and energy, to achieve well-being. The loss or threat of resource loss triggers greater resource allocation, which exacerbates vulnerability to a cycle of loss, making the ability to acquire resources and experience positive emotions increasingly important. Resource loss has a greater impact than its benefits; in other words, recovering from resource loss can become more difficult if individuals are unable to access the support or resources needed to cope with the situation. Students with an abundance of personal and social resources are better equipped to face academic pressures and distractions. In this study, the resources in question include mental health, lifestyle, and motivation, with the goal of achieving good academic performance.

Achievement Motivation

According to the research by Dong et al., (2024) achievement motivation is the internal force that drives extraordinary individuals to keep trying and persevere in life's struggles. Additionally, in studies by N. Li et al., (2023) and Lina et al., (2023) achievement motivation can be explained as an individual's internal drive to set high standards for themselves, strive for excellence, and achieve predetermined goals. Another definition by Erentaitė et al., (2022) states that achievement motivation is the factor that encourages students to make choices, demonstrate persistence, exert effort, and engage in tasks and activities related to achievement, including academic assignments and school activities. Motivation is a key factor influencing students' learning and plays a crucial role in reducing procrastination. Students exhibiting higher motivation to achieve are more likely to excel academically due to their stronger drive to succeed.

Healthy Lifestyle Behaviours

According to Gwizo & Gaikwad, (2020) lifestyle reflects the attitudes and values of society through ways of living. A positive lifestyle is the ability to enjoy life and face challenges, whereas a negative lifestyle is associated with illness, extreme cases, and causes of premature death. Research by Cai et al., (2021) dan Saintila et al., (2024) healthy lifestyle includes daily habits and choices that support optimal well-being and health, such as a nutritious diet, regular exercise, adequate fluid intake, sun exposure, adequate sleep, and others. These habits not only contribute to students' physical, mental, and social health but also have a positive relationship with their academic achievement. Berhanu & Shiferaw, (2023) add that adolescents are aware of healthy living practices that help prevent illness and promote well-being, although they often simultaneously engage in both healthy and unhealthy lifestyle behaviors.

Mental Health

In the study by Li et al., (2022) mental health is defined as a state of well-being in which a person feels relaxed and able to adapt, enabling them to achieve their psychological potential. In the educational context, mental health supports individuals in realizing their academic potential. Furthermore, according to the research by Radfar et al., (2021) and Hammer et al., (2024) mental health is seen as an important part of public health and is described by the World Health Organization (WHO) as "a state of well-being in which a person is aware of his or her abilities, is able to cope with the stresses of daily life, works productively and fruitfully, and is able to contribute to his or her community." Mental health is an essential component of overall health and well-being, including happiness, life satisfaction, and a positive attitude. It also includes one's ability to be productive, perform well at work, and establish strong social relationships.

Academic Performance

Academic performance is one of the key factors in a student's success in learning. According to Hammoudi Halat et al., (2023) academic performance refers to the degree to which students achieve set educational goals or the extent to which they meet their academic learning outcomes. Tadese et al., (2022) add that academic performance or achievement refers to the level of attainment of educational goals, both short-term and long-term, by students, teachers, or institutions. It is measured through continuous assessments or cumulative grade point averages (GPA). Furthermore, Miraj et al., (2021) academic achievement serves as a way for students to demonstrate their abilities and receive recognition for their achievements. Students who succeed and excel in school generally realize their intellectual potential in achieving academic goals and are able to communicate and express their views well. They possess the confidence to match the intellectual capabilities of others.

Hypothesis Development

Mental Health on Student Academic Performance

The COR theory, as explored in the study by Egozi Farkash et al., (2022) posits that resource loss can impede an individual's ability to cope with challenges, as it heightens stress and creates a deficit spiral that exacerbates crises, affecting various aspects of life. The study conducted by Mahdavi et al., (2021) found that mental health is positively correlated with academic achievement motivation. This is further reinforced by the findings of Camacho-Villa et al., (2023) which demonstrate that mental health (such as anxiety/depression) is positively correlated with academic grades, making mental

health an important consideration for improving academic performance. Additionally Chu et al., (2023) discovered that compromised mental health also increases the risk of declining academic performance. Therefore, this study aims to explore the role of mental health in students' academic performance.

H₁: Mental Health has a positive and significant influence on Students Academic Performance.

Healthy Lifestyle Behavior on Student Academic Performance

Based on COR Theory in Laura et al., (2024) adopting a healthy lifestyle is essential for providing personal resources that support individuals' subjective well-being, help cope with stress, and enhance their ability to meet demands. According to Bou-Hamad, (2020) a significant negative impact was found between poor lifestyle behaviors and the decline in students' academic performance. This is reinforced by the findings of Maniaci et al., (2023) and Berhanu & Shiferaw, (2023) who state that healthy lifestyle behaviors are recognized as significant predictors of academic achievement. The average score for students' healthy lifestyle behaviors is above average across all aspects. This is further supported by Mahfouz et al., (2024) which found that unhealthy lifestyle factors, such as lack of exercise, poor sleep, poor diet, unhealthy food choices, smoking, as well as mental health issues such as anxiety, negatively impact academic performance. Therefore, this study aims to investigate how healthy lifestyle behaviors affect students' academic performance.

H₂: Healthy Lifestyle Behavior has a positive and significant influence on Student Academic Performance

Achievement Motivation on Student Academic Performance

According to Templer et al., (2020) the COR theory in the motivation and stress model states that the threat of losing valuable resources leads to stress; however, goal orientation, emotional intelligence, and role clarity can mitigate its impact. Learning new things helps individuals acquire important resources such as knowledge and skills to cope with stress. Based on the study by X. Li et al., (2022) a positive correlation was found between achievement motivation, self-efficacy, academic achievement, and employability among university students. Furthermore, in research by (Abdelrahman, 2020 ; Chang et al., 2022; Mahboobeh Hosseini et al., 2022) achievement motivation was shown to positively influence active learning, which includes advanced learning, integrative learning, and reflective learning. In addition, this active learning has a positive effect on academic self-confidence. Thus, this study aims to design a model that examines the influence of achievement motivation on students' academic performance.

H₃: Achievement Motivation has a positive and significant influence on Students Academic Performance.

Framework of Thinking

This empirical research model provides a clear framework of the relationship between the proposed variables, as well as offers solutions to problems that organizations, government agencies, and educators need to address in critical situations.

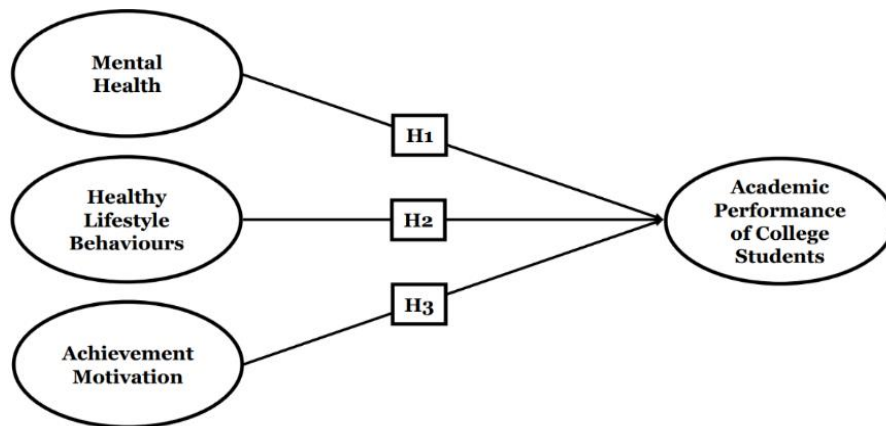


Figure 1. Framework of Thinking

METHOD

Population and Sampling

This research applies quantitative methods to test the relationship between exogenous and endogenous variables. The quantitative approach is used to develop new theories or hypotheses, which are based on propositions and hypotheses that have been proposed previously and then tested using data. This process concludes with either the discovery of new hypotheses or the testing of existing ones (Ferdinand, 2014). The research population includes students in the Solo Raya region, and sampling was conducted using the cluster random sampling technique, a part of probability sampling, to ensure a representative distribution of students from Raden Mas Said State Islamic University of Surakarta, Muhammadiyah University of Surakarta, and Sebelas Maret University. This technique provides equal opportunities for every individual in the population to be selected as a sample, and cluster random sampling was applied to determine the sample from a broad population (Sugiyono, 2014).

Data Collection

Data was collected through an online questionnaire, relating to mental health, healthy lifestyle behaviors, achievement motivation, and students' academic performance. This method expedited responses and facilitated distribution across the three universities studied. According to Hair et al., (2010) the minimum sample size should reach at least five times the number of variables or indicators under study. Therefore, the minimum required sample was 5 times 32 indicators, amounting to 160 samples. A total of 246 samples were successfully collected via the online questionnaire, with measurements conducted using a 7-point Likert scale, which, according to Munshi, (2014) provides a wider range of responses, allowing researchers to capture more detailed and accurate variations. Data analysis was carried out using Partial Least Squares Structural Equation Modeling (PLS-SEM) with Smart PLS to explore the relationships between variables.

Variable Measurement

Achievement motivation encompasses the effort to become competent in various activities aimed at attaining success and excellence (Atik, Karaman and Sari, 2024; Prasetyo *et al.*, 2024). Its indicators include self-effort, future orientation, admiration for success, seizing opportunities, fulfilling responsibilities, satisfaction with results, providing opportunities for others, and task organization (Emamjomeh, Toghyani and Bahrami, 2021; Chang, Wu and Ye, 2022). Furthermore, according to Saintila *et al.*, (2024) and Alothman *et al.*, (2024) a healthy lifestyle is defined as a collection of daily behaviors and choices that support an individual's well-being and optimal health. These behaviors include practices and habits influenced by social and environmental factors, with indicators such as exercising regularly, eating breakfast, avoiding cigarettes and alcohol, eating vegetables and fruits, and maintaining a consistent sleep routine (Kilani *et al.*, 2020; Park and Lee, 2020; Xiao *et al.*, 2022; Faris *et al.*, 2023; Mahfouz *et al.*, 2024).

Mental health, as defined by WHO, refers to a state of psychological well-being that enables individuals to cope with life's stresses and pressures, work productively, develop their potential, and contribute to social life (Wang, Xue and Wu, 2023; Xiang *et al.*, 2024). Its indicators include the ability to relax, enthusiasm, positive thinking, a sense of self-worth, problem response, self-control, social emotions, and the influence of external factors (Bertasi *et al.*, 2021; Xiao *et al.*, 2022; Yaghmour *et al.*, 2023). Additionally, according to research (Tang and He, 2023; Tawfik and Elmaasrawy, 2023) academic performance refers to students' ability to master knowledge and skills, complete tasks, and their overall achievements during the learning process. Academic performance indicators include additional learning, academic skills, work efficiency, internet utilization, GPA improvement, personal development, organizational participation, and campus representation (Realy *et al.*, 2020; Ibrahim *et al.*, 2021; Limniou *et al.*, 2021; Mosleh *et al.*, 2022; Salimi *et al.*, 2022; Gumasing and Castro, 2023).

RESULTS AND DISCUSSION

A. Results

The subjects of this research are students enrolled in educational institutions in Solo Raya, with the sample distribution as follows: 38.2% from Raden Mas Said State Islamic University of Surakarta, 31.3% from Sebelas Maret University, and 30.5% from Muhammadiyah University of Surakarta. Among the 246 respondents, 66.7% are female, and 89.43% are aged 17-21 years. Additionally, 81.7% of the students have a GPA of 3.5 or higher, with the majority being sixth-semester students, accounting for 41.05%. Statistics regarding the characteristics of the respondents are presented in table 1.

Table 1. Descriptive Statistics of Respondent Demographics

	Description	Frequency	Presentase
Gender	Male	82	33,3%
	Female	164	66,7%
	Total	246	100%
Age	≤ 16 years of age	1	0,4%
	17-21 years of age	220	89,43%
	≥ 21 years of age	25	10,16%
	Total	246	100%
University	Raden Mas Said State Islamic University Surakarta	94	38,2%
	Sebelas Maret University	77	31,3%
	University of Muhammadiyah Surakarta	75	30,5%
	Total	246	100%
	Semester	2	44
3		1	0,4%
4		73	29,67%
5		2	0,81%
6		101	41,05%
7		2	0,81%
8		17	6,91%
10		4	1,62%
12		2	0,81%
Total		246	100%
GPA		≤ 2,99	3
	3-3,49	42	17,07%
	≥ 3,5	201	81,7%
	Total	246	100%

Source: The Processed Primary Data (2024)

The validity test is used to assess the feasibility of the items in the questionnaire, which are deemed valid. To measure the validity of latent variables with their indicators, outer loading can be used, where the expected value is greater than 0.7. This indicates that the information from the indicator has been absorbed by the latent variable by more than 50%. Additionally, the AVE value must also be greater than 0.5. Finally, discriminant validity is assessed using cross-loading, where a construct is considered adequate if its value is greater than that of other constructs. Furthermore, the reliability test is carried out to determine whether the indicators are reliable as questions in the study,

by examining the composite reliability and Cronbach's alpha values which must be greater than 0.7. Table 2 presents the data from the validity and reliability tests, which have been re-estimated to obtain accurate results.

Table 2. The results of validity and reliability tests on indicators of mental health, healthy lifestyle behaviors, achievement motivation, and academic achievement

Statements	R	AVE	α	CR	Description
Mental Health ((Bertasi <i>et al.</i> , 2021; Xiao <i>et al.</i> , 2022; Yaghmour <i>et al.</i> , 2023))					
Enthusiasm and initiative in doing activities	0.810	0.717	0.900	0.927	Accepted
Think positively and stay calm when panic strikes	0.885				
Not overreacting when responding to issues	0.887				
Control yourself well when troubled	0.881				
Controlling emotions and not taking offense easily when with others	0.763				
Healthy Lifestyle Behavior ((Kilani <i>et al.</i> , 2020; Park and Lee, 2020; Xiao <i>et al.</i> , 2022; Faris <i>et al.</i> , 2023; Mahfouz <i>et al.</i> , 2024))					
Exercise at least once a week	0.746	0.614	0.874	0.905	Accepted
Breakfast before starting your activity	0.742				
Consuming fiber such as fruits and vegetables	0.850				
Self-cooking and cutting down on fast food	0.800				
Reduce energy-dense snacks that contain excessive carbohydrates and sugar	0.799				
Go to bed on time and get enough sleep	0.759				
Achievement Motivation ((Emamjomeh, Toghiani and Bahrami, 2021; Chang, Wu and Ye, 2022))					
Doing more than what is desired	0.817	0.619	0.912	0.928	Accepted
Future oriented	0.795				
Admire people who have achieved success	0.709				
Always seize the opportunity	0.820				
Do their best when given a responsibility	0.790				
Satisfaction with a job well done	0.739				
Have full autonomy in completing assigned tasks	0.756				
Ability to organize a task	0.856				
Academic Performance ((Realy <i>et al.</i> , 2020; Ibrahim <i>et al.</i> , 2021; Limniou <i>et al.</i> , 2021; Mosleh <i>et al.</i> , 2022; Salimi <i>et al.</i> , 2022; Gumasing and Castro, 2023))					
Attending tutoring outside of class	0.729	0.632	0.883	0.911	Accepted
Confident of academic skills and abilities	0.836				

Able to complete the work efficiently	0.826
Utilize technology to learn outside the classroom	0.728
The GPA every semester has increased	0.804
By learning to improve communication, creativity, and teamwork	0.859

Source: The Processed Primary Data (2024)

The multicollinearity test is assessed based on tolerance value and variance inflation factor (VIF). All variables in this study have VIF values below 10, which indicates that there is no multicollinearity problem between these variables. From the SEM analysis results, the R-Square value is 0.794, which means that 79.4% of exogenous variables can be explained by endogenous variables. Table 3 presents the results of the R-Square and Adjusted R-Square values.

Table 3. Value of R Square

<i>Academic Performance</i>	R Square	R Square Adjusted
	0.794	0.791

Source: The Processed Primary Data (2024)

Reporting Research Results

Subsequently, the strength of the direct and indirect relationships between variables was tested using path analysis. The researcher applied a significance level of 5%, and the hypothesis test results were compared between the p-value and t-statistic. The criterion states that if the p-value is less than 0.05 and the t-statistic is greater than 1.96, the hypothesis can be accepted. Table 4 presents the structural model evaluation results obtained from the bootstrapping report in SmartPLS.

Table 4. Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Summary
<i>Mental Health → Academic Performance</i>	0.250	0.254	0.066	3.791	0.000	Positive and significant impact
<i>Healthy Lifestyle Behavior → Academic Performance</i>	0.167	0.169	0.060	2.760	0.006	Positive and significant impact
<i>Achievement Motivation → Academic Performance</i>	0.564	0.557	0.059	9.583	0.000	Positive and significant impact

Source: The Processed Primary Data (2024)

The results of this study empirically reveal a positive and significant effect of mental health on students' academic performance, with a significance level of 0.000. Furthermore, the hypothesis concerning the influence of healthy lifestyle behaviors on academic performance shows a positive and significant effect, with a significance level of 0.006. Finally, a positive and significant relationship was identified between achievement motivation and students' academic performance, also with a significance level of 0.000.

B. Discussion

The average score for achievement motivation is higher compared to the other variables, indicating strong academic performance among students. Research shows that students with high motivation tend to be persistent, have a clear future orientation, and possess a strong sense of autonomy regarding the tasks assigned to them (Emamjomeh, Toghiani and Bahrami, 2021; Chang, Wu and Ye, 2022). High achievement motivation is effective in supporting students' academic goals and professional development. According to Templer et al., (2020) individuals with a high learning goal orientation are more resilient to heavy workloads and experience less frustration. Role ambiguity, as an obstructive stressor, can drain resources. Those with low learning goal orientation tend to be less innovative under pressure, while those with a high orientation are more innovative when facing stress, as learning goal orientation serves as a psychological resource that protects against resource loss due to role ambiguity.

The study by X. Li et al., (2022) emphasizes the importance of psychological well-being and the integration of achievement motivation in educational plans to enhance skills and educational sustainability. Despite experiencing academic setbacks, students need to maintain their focus on goals and the pursuit of knowledge. Supporting this, findings from Yukhymenko-Lescroart, (2023) indicate that a strong academic identity and orientation contribute to higher GPAs. Academic integrity is also essential to ensure the quality of learning and students' success in the workforce, where achievement motivation helps reduce academic misconduct. Achievement motivation has a strong influence on academic performance. An important factor in shaping effective achievement motivation is individual diligence.

Research by Kuśnierz et al., (2020) states that individual diligence is a predictor of achievement motivation related to discipline and hard work in achieving high performance in school, work, as well as in personal interests and hobbies. Furthermore Motevalli et al., (2020) highlight the importance of supporting students' psychological needs, which affect their motivation to learn. Individuals have the right to determine their learning methods and require positive support from their environment. This is backed by findings from Sánchez-Cardona et al., (2021) which state that educators need to understand student motivation to create appropriate educational challenges. Higher education institutions must support the development of a growth mindset to improve learning outcomes, career success, and reduce unemployment.

In the study by K. Li et al., (2024) the Conservation of Resources (COR) theory posits that individuals' efforts to maintain and acquire resources create a cycle of long-term benefits, where positive psychological conditions enhance cognitive abilities and build resources to achieve life goals.

Individual resilience increases psychological resources and achievement. This positive state fosters behaviors such as self-regulation, leading to positive outcomes, such as academic performance. Chu et al., (2023) mention that poor mental health remains a risk factor that can affect academic performance, even when healthy lifestyle practices are implemented. Dekker et al., (2020) suggest targeted interventions through referrals to psychologists to help students focus on achieving their goals. This is reinforced by the findings of Wulandari & Subiyanto, (2024) which indicate that psychological well-being will also encourage dynamic attitudes and actions that enhance productivity.

According to Laura et al., (2024) the Conservation of Resources (COR) theory posits that a healthy lifestyle functions as a resource that helps individuals cope with stress and maintain well-being. Mahfouz et al., (2024) found that healthy living patterns, such as maintaining a balanced diet and avoiding smoking, enhance concentration and facilitate learning. Students with a healthy lifestyle also tend to achieve higher GPAs. Furthermore, findings from Saintila et al., (2024) indicate that physical activity is crucial for children's health, and neglecting it can increase the risk of diseases that adversely affect academic performance.

CONCLUSION

Based on the analysis results, it can be concluded that high achievement motivation significantly impacts students' academic performance. This motivation acts as a key driver for achieving optimal academic results. Additionally, good mental health and healthy lifestyle choices, including a balanced diet, regular physical activity, and sufficient rest, also contribute positively to academic success. This study enhances the existing literature on the significance of achievement motivation as a crucial factor in academic performance. The findings can serve as a reference for educational institutions in designing programs that not only support psychological well-being and healthy lifestyles but also focus on enhancing achievement motivation as a key to academic success. Given the importance of motivation in preparing students to adapt to the challenges of postgraduate studies and to achieve success in their careers and professional lives.

LIMITATION

Future research is recommended to expand the scope to include more areas within Solo Raya, as the current study is limited to three major institutions, which may restrict the generalization of the findings. Involving more educational institutions will provide opportunities to identify additional factors that comprehensively influence students' academic performance and offer a more holistic view of the challenges and opportunities faced by students. Additionally, comparative studies across universities should be carried out to explore how differences in culture and educational policies among various institutions influence the relationship between mental health, lifestyle, achievement motivation, and academic performance. The implementation of programs informed by these findings, along with additional research, is anticipated to improve students' academic performance and better equip them for the challenges of postgraduate education and the workforce.

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