



Empirical Insights into the Symbiosis of Healthy Living and Physical Fitness among University Sports Students

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ABSTRACT

A healthy lifestyle and physical fitness are two important variables to support the success of sports students in undergoing lectures. The purpose of this study was to determine the relationship between a healthy lifestyle and the physical fitness of students. The correlational research method was used in this study involving 32 male students. Healthy lifestyle data was collected using questionnaires while physical fitness data was obtained by conducting a cooper test, then the data was analyzed using the Pearson correlation formula. The results of this study showed a positive and significant relationship between a healthy lifestyle and students' physical fitness ($r = 0.40$, $p = 0.00$). The conclusion of this study is that the physical fitness of students is related to the healthy lifestyle of these students, with the regularity of their lifestyle and carried out in a disciplined manner, their fitness level will also be better.



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INTRODUCTION

Higher education becomes a stage for student growth and development, including for those who actively participate in sports activities. Sports students are not only required to balance between academic achievement and success in sports, but also must maintain their physical and mental health (Gusmawan et al., 2023). A strong correlation exists between a healthy lifestyle and positive mental health. Regular exercise, a balanced diet, sufficient sleep, and stress management contribute to well-being. Physical activity releases endorphins, a balanced diet supports brain function, consistent sleep enhances cognitive function, and effective stress management reduces the impact of daily challenges. Overall, a healthy lifestyle promotes a harmonious balance between physical and mental health, reducing the risk of mental health disorders. Therefore, the relationship between a healthy lifestyle and physical fitness level is a very important aspect to explore (Azizah et al., 2023) (Budianto, 2022).

Physical fitness plays a crucial role in the overall well-being and academic performance of students. Engaging in regular physical activity has been linked to improved cognitive function, enhanced concentration, and better academic achievements. Exercise increases blood flow to the brain, promoting the growth of neurons and supporting cognitive processes such as learning and memory (Lin & Kuo, 2013) (Russell et al., 2014). Additionally, maintaining physical fitness contributes to better stress management, reduced anxiety, and improved mood, all of which positively impact a student's mental health. Regular exercise also helps establish healthy habits early in life, promoting a lifelong commitment to well-being. Beyond the physical benefits, participation in sports or fitness activities fosters teamwork, discipline, and goal-setting skills, contributing to the holistic development of students. Overall, prioritizing physical fitness is integral to creating a conducive environment for academic success and fostering a healthy and balanced lifestyle for students (Cappelen et al., 2017). In their daily lives, sports students often engage in regular exercises, matches, and demanding academic assignments. This can create significant physical and mental stress. In this context, a healthy lifestyle is the main foundation to support their physical fitness (Stults-Kolehmainen & Sinha, 2014). Aspects such as a balanced

diet, adequate sleep, and stress management are key to ensuring their bodies and minds function optimally (Briguglio et al., 2020) (Ramar et al., 2021)

A healthy lifestyle also has a direct impact on physical fitness levels. A good diet, for example, can provide the fuel needed by the body to carry out physical activity efficiently (Ortlepp et al., 2004) (Ozkan et al., 2018). Conversely, nutritional deficiencies or excess intake of unhealthy foods can hinder the process of muscle recovery and growth, which can affect sports performance (Rao, 2019)(Chung et al., 2009).

In addition, adequate sleep also has an important role in the recovery of the body after intensive physical activity. Sports students often tend to sacrifice breaks to complete academic tasks or participate in social activities. However, lack of sleep can result in decreased endurance, increased risk of injury, and negatively affect mental health (Dattilo et al., 2011) (Chennaoui et al., 2021) (Dattilo et al., 2020).

Not only the physical aspect, a healthy lifestyle also has an impact on the mental and emotional health of sports students. Good stress management, including through relaxation and recreational activities, can help them maintain emotional balance. This balance not only has a positive impact on personal well-being, but also on interpersonal relationships and performance in sports teams (Walsh, 2011).

In the holistic context of health, this article will also explore how sports students can achieve a balance between body, mind, and spirit through healthy living habits. Therefore, understanding the relationship between a healthy lifestyle and physical fitness level is not only about achieving sports achievement, but also about creating a solid foundation for overall well-being.

It is hoped that this research can provide in-depth insights for sports students and related parties, such as coaches and support staff. Through a better understanding of these interrelationships, it is hoped that sports students can take concrete steps to improve their lifestyles, optimize sports performance, and live a balanced and meaningful campus life.

METHOD

Research Design

This research is research that uses a quantitative approach with a correlational method. Researchers tried to see the relationship between healthy lifestyle and the level of physical fitness of sports students.

Participants

A total of 32 coaching department students were voluntarily asked to be participants in this study. All participants involved in this study were men with an average age of 21 years, their average height was 160 cm and their average weight was 52 kg.

Instruments

Healthy lifestyle

The instrument used in this study is a healthy lifestyle questionnaire adopted from previous research (Rezaldhi, 2022).

Physical fitness

Researchers used the Cooper test to measure their physical fitness levels (Penry, 2008). Participants were asked to warm up before doing the test, besides that the researcher also provided an explanation related to the test implementation procedure so that there was no misunderstanding in the implementation of the test. Before the test, the participants were also asked for data on their names, ages, genders, heights, and weights.

Data analysis

The data analysis used in this study is inferential statistics. The person product moment correlation test with the help of SPSS version 25 was used in this study. Before the correlation test is carried out, the data is first tested for normality distribution using the Shapiro will test.

RESULT AND DISCUSSIONS

Research Result

The results showed that the physical fitness level of coaching department students in general (44%) was in the sufficient category. Of all samples that have carried out the *Cooper test*, there are also those who have a very good freshness category of 6% of people and less than 3% as illustrated in figure 1 below.

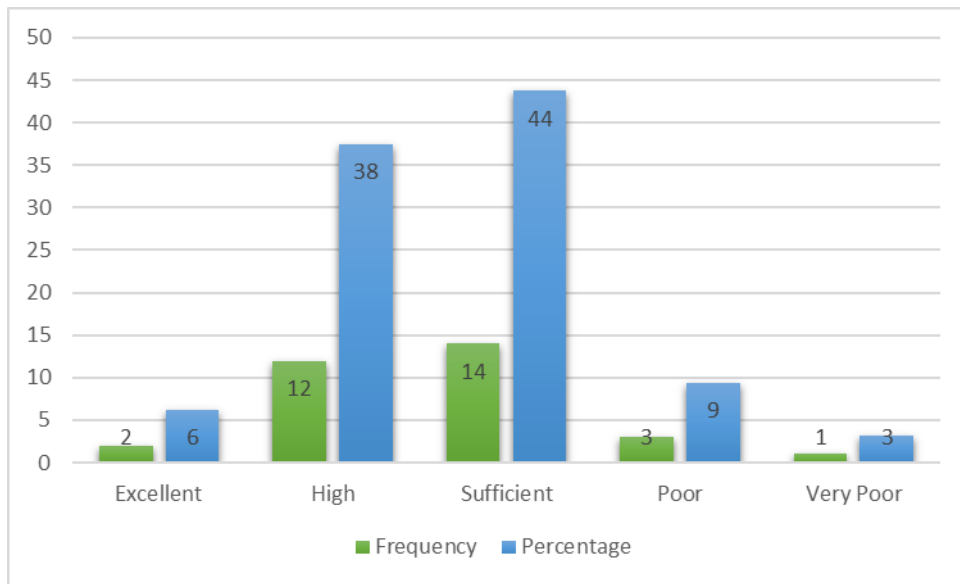


Figure 1. Physical fitness level

The results showed a healthy lifestyle of coaching department students in general (66%) were in the sufficient category. Of all samples that have carried out questionnaire filling, 6% of them have a very good healthy lifestyle, and there are not 0% of students who have a very bad healthy lifestyle as illustrated in figure 2 below.

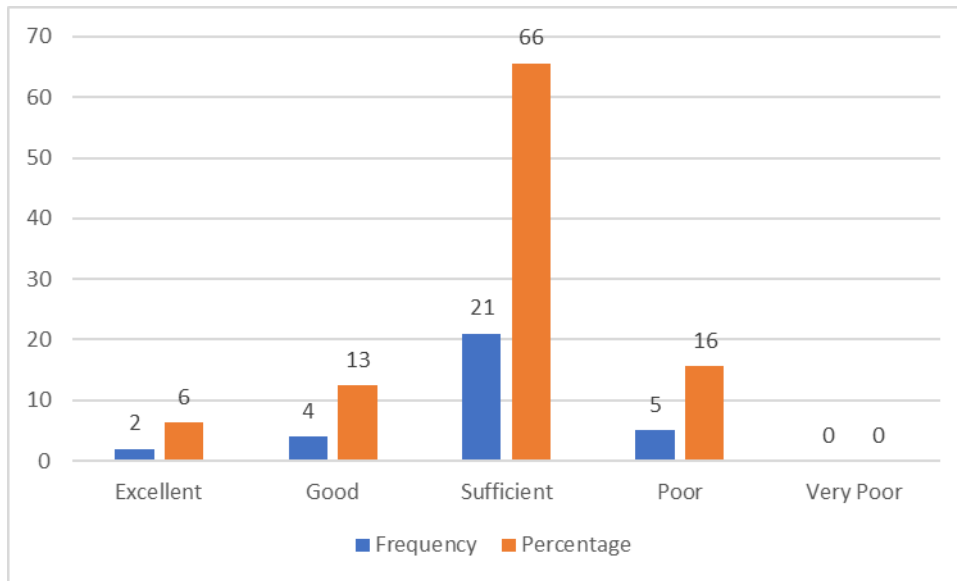


Figure 2. Healthy lifestyle

Table 1. Descriptive statistics of healthy lifestyles and physical fitness levels of sports students

	Healthy Lifestyle	Physical Fitness Level
Mean ± Standard Deviations	70.2 ± 10.6	12.9 ± 2.0
Max	99.0	19.2
Min	53.0	10.1

The results of the data normality test showed normal distributed data so that it was continued with the pearson product moment correlation test between the level of physical fitness and a healthy lifestyle and obtained a value of $r = 0.4$ with $p = 0.00$, $p < 0.05$.

Discussions

A balanced diet, adequate sleep, and stress management were the main factors identified as health cornerstones that support sports performance and academic achievement. The discussion of optimal nutritional needs and effective body recovery shows that these aspects not only affect physical endurance, but also have a direct impact on the concentration power and cognitive focus of sports students (Fox et al., 2018).

Sports students, who are often faced with hectic schedules and multitasking challenges, they must maintain a holistic balance of health (Paluska & Schwenk, 2000). In addition, stress management, recreation, and other relaxation activities are recognized as key to achieving that balance, helping sports students better deal with pressure. Physical fitness is essential for students as it significantly influences both their overall well-being and academic performance. Engaging in regular physical activity has been associated with improved cognitive function, heightened concentration, and enhanced academic achievements. Exercise boosts blood flow to the brain, facilitating the growth of neurons and supporting crucial cognitive processes like learning and memory. Moreover, maintaining physical fitness contributes to effective stress management, decreased anxiety levels, and an overall uplifted mood, positively impacting students' mental health. The commitment to regular exercise also instills healthy habits early on, promoting a lifelong dedication to well-being. Participating in sports or fitness activities not only offers physical benefits but also nurtures teamwork, discipline, and goal-setting skills, contributing to the comprehensive development of students. In essence, prioritizing physical fitness is pivotal in creating an environment conducive to academic success and cultivating a healthy, balanced lifestyle for students.

A good diet and optimal recovery can improve endurance, reduce the risk of injury, and provide a competitive advantage. By presenting up-to-date data and research. The importance of discussing concrete steps to improve a healthy lifestyle among sports students cannot be ignored. Maintaining a healthy lifestyle, characterized by regular exercise, a balanced diet, sufficient sleep, and stress management, is closely correlated with positive mental health outcomes. Engaging in physical activity releases endorphins, neurotransmitters that contribute to feelings of happiness and well-being (Zhang & Chen, 2019), while a nutrient-rich diet provides essential components for optimal brain function (Manore et al., 2009) (Spano et al., 2023). A consistent sleep schedule is crucial for cognitive function and emotional resilience, as it allows the brain to consolidate memories and regulate mood (Lane & Lovejoy, 2001)(Kleinert, 2007). Additionally, effective stress management, such as through mindfulness or relaxation techniques, helps mitigate the impact of daily challenges on mental well-being. Overall, a healthy lifestyle promotes a harmonious balance between physical and mental health, fostering a positive mindset and reducing the risk of mental health disorders (Hautekiet et al., 2022)(Maenhout et al., 2020) (Melnyk et al., 2009).

By comprehensively discussing all these aspects, it will make a meaningful contribution to the understanding of the complexity of the relationship between a healthy lifestyle and the level of physical fitness of sports students (Biddle et al., 2003). It is hoped that this study can take deep insights and apply this knowledge to improve the quality of life, sports performance, and academic achievement of sports students at the college level. The role of a healthy lifestyle and physical fitness for students is paramount, influencing various aspects of their lives. Maintaining good health through regular exercise, balanced nutrition, sufficient sleep, and stress management positively impacts academic performance, cognitive function, and overall well-being. Physical fitness enhances concentration and memory, promoting optimal learning. A healthy lifestyle fosters effective stress coping mechanisms, reducing anxiety and contributing to mental well-being. Moreover, it establishes habits that support long-term health, creating a foundation for a balanced and fulfilling life. Engaging in physical activities also cultivates discipline, teamwork, and goal-setting skills, shaping students into well-rounded individuals. Ultimately, the integration of a healthy lifestyle and physical fitness is instrumental in nurturing both the academic success and holistic development of students

The implications of this research are particularly relevant for a range of relevant parties, including colleges, trainers, and support staff. Colleges can use these findings as a basis for the development of holistic wellness programs that support sports students in reaching their maximum potential. Coaches and support staff can leverage these insights to devise better time management strategies and psychological support for sports students. Overall, this study makes a valuable contribution to the understanding of the importance of a healthy lifestyle in supporting the physical fitness of sports students. Reminded of the interrelated aspects of health, this study highlights the need for a holistic approach in supporting sports students in a college setting. It is hoped that these findings will form a foundation for further research that is more in-depth and applicable, as well as have a positive impact on the well-being and achievement of sports students in the future.

CONCLUSION

The conclusion of this study shows that the relationship between a healthy lifestyle and physical fitness levels in sports students in a college environment has a significant impact. A balanced diet, adequate sleep and stress management have proven to be key factors in supporting sports performance and the overall well-being of sports students. The importance of maintaining a holistic balance of health, including mental and emotional health, is also seen as a crucial element in ensuring the success of sports students in various aspects of their lives.

Future research could focus on developing more specific and targeted health education interventions or programs to promote healthy lifestyles among sports students. Involving the active participation of sports students, coaches, and other supporting parties can strengthen the implementation of healthy living habits. In addition, further research can explore additional variables that might influence the relationship between healthy lifestyle and physical fitness, such as genetic factors, physical environment, or more profound social aspects.

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