


Research Article

The correlation between junior high school students' level of physical fitness and their level of healthy lifestyle

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Background: Research on the relationship between physical fitness and a healthy lifestyle has become widespread, and most studies show that the two are related. However, these studies still indirectly examine the relationship between physical fitness and a healthy lifestyle, especially in junior high school students. Objective: This research aims to determine whether there is a relationship between physical fitness and the level of a healthy lifestyle. Methods: This research uses a quantitative descriptive method with a correlational design. This research used the population of the author, which was all eighth-grade students at Negeri 6 Cimahi Junior High School; there were ten classes totaling 380 students. The sample was eighth-grade students from 10 Cimahi 6 State Junior High School classes, with 37 students. The research instruments chosen were questionnaires for healthy lifestyles and the TKSI (Indonesian Student Fitness Test) for physical fitness. The IBM SPSS version 26 software was used to help with the data analysis in this investigation. Result: The correlation study results between physical fitness and the degree of a healthy lifestyle revealed a substantial positive association between the two, with a p-value of $0.007 < 0.05$ and a correlation coefficient of 0.434 in the medium category. Conclusion: Based on the research results, the author can conclude that there is a relationship between physical fitness and a healthy lifestyle and the level of a healthy lifestyle in junior high school students. This research implies that programs regarding healthy lifestyles must be given to students, so it is hoped that students will have good physical fitness.

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Introduction

Physical education, sports, and health learning are carried out at almost all education levels using various teaching materials and appropriate, creative, effective, and efficient delivery methods. This is especially true for middle school students who are growing to explore their identity, so teachers need more careful guidance in delivering learning (Indah, 2022). Physical education is integral to the overall education system (Sesfao, 2018). Physical education, sports, and health learning at school are essential in providing opportunities for students to participate in various experiences through physical activities, sports, and health (Suryani, 2021). This experience encourages better physical growth and psychological development and establishes a healthy and fit lifestyle throughout life (Arifandy et al., 2021).

Students have been taught healthy lifestyles since elementary school. Students learn about healthy lifestyles through Physical Education, Sports, and Health subjects. Hopefully, this will make students understand the benefits of exercise for physical health and a healthy lifestyle. This is because teachers tend to convey practical content compared to theoretical content, and the content taught about healthy lifestyles to students is still less exciting and seems monotonous because it is approaching the exam. Schools and families must support and understand the importance of maintaining personal health so that generations can become valuable assets for development. Increasing human resources (HR) in development cannot be separated from the elements of education and health. Because health

is the most critical driver of educational success, the education obtained is very helpful in increasing degrees (Priono et al., 2022).

In addition, a sedentary lifestyle and insufficient exercise are global health problems. However, it is also commonly discussed in many other nations, particularly among students (Park et al., 2020). The impact of the COVID-19 pandemic, which has limited all physical activities, coupled with rapid technological advances in the Industrial Revolution 4.0 era, has made children seem trapped in a sedentary lifestyle (Andriani, 2021; Hambali et al., 2021). Many research studies demonstrate the connection between inactivity and several health issues, including diabetes, heart disease, obesity, and mental health issues (Bokau et al., 2023; Lurati, 2018; Mainous et al., 2019; Tully et al., 2020).

It is essential to have elements that influence humans. Body intensity, BMI, clean and healthy living behavior, psychology, and characteristics related to healthy lifestyle and physical fitness of students (Sitepu, Sinuraya, Martauli, 2023). Therefore, physical education provides opportunities for students to learn various coaching activities in the school environment while developing their potential in terms of physical, mental, social, emotional, and moral fitness (Siedentop & Van der Mars, 2022). Physical fitness is a person's ability to perform tasks at a moderate level and intensity without experiencing excessive fatigue to carry out the following task (Wibowo, Sari, & Purilawa, 2020). Physical fitness is an individual need that plays a vital role in supporting a person's routine in the form of physical activity (Oktaviani & Wibowo, 2021).

Studies on the relationship between physical fitness and a healthy lifestyle have grown commonplace, and many research findings indicate that each of them is related (Filgueira et al., 2021; Mulyaningsih et al., 2023; Tavakol et al., 2023; Wahana, 2019). However, these studies still indirectly examine the relationship between physical fitness and a healthy lifestyle; the research instruments also tend to use general fitness tests, not specific ones for students. Therefore, this research will examine the direct relationship between physical fitness levels and healthy lifestyles, especially for junior high school students. In this section, the research instrument uses the Indonesian student fitness test, a new research instrument in learning, especially in research on physical fitness.

The relationship between physical fitness and a healthy lifestyle has a problem, such as in one of the junior high school, most or almost no students implement or carry out a healthy lifestyle; for example, their diet is not maintained by choosing unhealthy and nutritious foods, and they do not maintain personal hygiene. Sleeping irregularly, not being enthusiastic about participating in sports lessons, causing reduced fitness and students' bodies becoming unhealthy. Judging from this problem, researchers are interested and want to know more about the research entitled "The Relationship between Physical Fitness and the Level of Healthy Lifestyle in Middle School Students." This research aims to determine whether there is a relationship between physical fitness and the level of healthy lifestyle in junior high school students.

Method

Research Design

This study employed a quantitative descriptive methodology with a correlational technical approach, where in this research, the researcher wants to find the relationship between physical fitness and healthy lifestyle, especially in junior high school students. An illustration of the research design using correlation techniques can be seen in Figure 1.

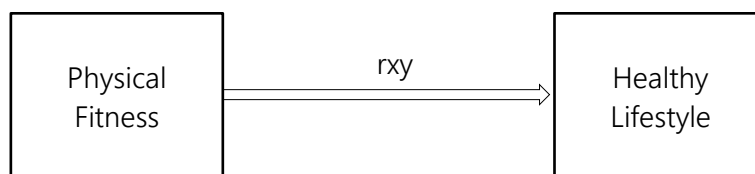


Figure 1. Research Design of Correlation in Research

Participants

The participants in this study were all eighth graders of Cimahi 6 State Junior High School, totaling 380 people and consisting of 10 classes. Because the population was too large and researchers could not study directly, a sample of 37 people was taken, consisting of 19 men and 18 women. This sample was determined using a cluster sampling technique, where the researcher only took one class out of ten.

Research Instruments

In this study, researchers used two types of instruments as the basis for data collection and processing, namely the Indonesian Student Fitness Test (TKSI) phase D consisting of five test items, namely: 1) Bleep Test; 2) Sit Ups; 3) Standing Broad Jump; 4) T-Test; 5) Hand Eye Coordination Test. This exam is intended to gauge junior high school pupils' level of physical fitness (Muhajir et al., 2021). Meanwhile, the author adopted the healthy lifestyle questionnaire for the level of healthy lifestyle using a questionnaire (Indah, 2022), which is divided into four alternative answers: always done, often done, sometimes done, and never done.

Data Analysis

The data analysis technique in quantitative correlational research aims to determine the extent of the relationship between variables, and of course, it is carried out through several stages. The data obtained from each test item is rough; subsequently, the approximate findings are translated into values by reviewing the rough data from each test item that has been completed. The stages in correlational data analysis are: 1) Calculating the average value and standard deviation, 2) Testing data normality, 3) Correlation test, and 4) Hypothesis testing. Data analysis in this research was assisted using the IBM SPSS version 26 program.

Results and Discussion

Result

The research results presented in this study are data on the results of students' physical fitness tests through TKSI phase D and also data on the results of a healthy lifestyle level questionnaire, which has a total of 48 statements, consisting of 8 indicators, each indicator totaling six statements of both types. Positive and negative. The first results presented during the data analysis stages are the average score and standard deviation, presented in Table 1.

Table 1. Average Result Data and Standard Deviation for each Variable

N	Variable	Mean	Std. Deviation	Minimum	Maximum
37	Physical Fitness	17.84	2.609	12	22
	Healthy Lifestyles	142.95	10.541	120	176

Based on the analysis results in Table 1, with a sample size of 37, the average level of physical fitness (X) is 17.84, the standard deviation is 2,609, the minimum value is 12, and the maximum value is 22. Meanwhile, at the healthy lifestyle level, the average value obtained is 142.95, with a standard deviation of 10.541, a minimum score of 120, and a maximum score of 176.

After the average and standard deviation data are obtained, then carry out correlational testing using the product moment test through the SPSS version 26 program with the basis for decision-making

if the significance value is <0.05, then physical fitness and healthy lifestyles are related, but only if the significance value is more significant than 0.05, then there is no relationship between variable.

Table 2. Correlation Test Results Data between Variables X and Y

Variable		Physical Fitness (X)	Healthy Lifestyles (Y)
Physical Fitness	Pearson Correlation	1	.434**
	Sig. (2-tailed.)		.007
	N	37	37
Healthy Lifestyles	Pearson Correlation	.434**	1
	Sig. (2-tailed.)	.007	
	N	37	37

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2 above shows that the significance is 0.007, and the correlation coefficient is 0.434. Because the significance value obtained is 0.007, indicating that $0.007 < 0.05$, meaning that there is a correlation between physical fitness and the level of a healthy lifestyle. From the results of this score, a positive value is obtained; in summary, the greater the level of physical fitness, the higher the healthy lifestyle. Moreover, if we look at the correlation coefficient interval, the value of 0.434 is in the medium category (Putri et al., 2023).

Discussion

Based on the investigation's findings on the relationship between physical fitness and the level of a healthy lifestyle, The calculated r-value indicates a positive and statistically significant correlation between the degree of physical fitness and the adoption of a healthy lifestyle. This lends credence to the theory that physical fitness and a reasonable degree of healthy living are positively correlated. This means that the higher the physical fitness, the higher the level of a healthy lifestyle. On the other hand, the lower the physical fitness, the lower the healthy lifestyle among junior high school students.

The results of this research are in line with several theories which state that a healthy lifestyle has a vital role in health because a healthy lifestyle can help increase and maintain a person's level of physical fitness (Afdinda et al., 2021; Dwiningrum & Nuruhidin, 2022; Mulyaningsih et al., 2023). Maintaining a healthy lifestyle is crucial to achieving optimal physical fitness, namely eating, resting, and exercising (Panggraita et al., 2020; Pratama & Yuliandra, 2020). Additionally, a healthy lifestyle that can compromise health must be avoided to maintain a good level of health (Islamiati & Budiman, 2021).

Maintaining students' lifestyles will have a good effect on physical fitness. A healthy lifestyle, including food, drink, nutrition, and exercise, is also necessary (Rohmah & Muhammad, 2021). The body needs energy to carry out daily tasks. Therefore, proper and good nutrition helps the body carry out daily activities (Sitepu et al., 2023). Physical fitness is essential for humans because it supports the results of activities (Sinuraya & Barus, 2020). To maintain physical fitness, students must achieve the desired level of physical fitness, such as exercising regularly and avoiding unhealthy eating patterns (Sobarna et al., 2020).

Several factors that influence physical fitness are a healthy lifestyle. A healthy lifestyle is essential for physical fitness (Warburton & Bredin, 2016), because a healthy lifestyle can help increase and maintain a person's level of physical fitness (Andrieieva et al., 2019). Physical fitness is a person's ability to complete the day's tasks without experiencing fatigue, which means energy expenditure. Carrying out sports activities has many health benefits, including the child's body becoming healthy and fit (Malm et al., 2019). In line with this opinion, it is said that the relationship between physical freshness and health is that what will be obtained from physical freshness is mental health so that you can carry out daily tasks with new energy and new thoughts (Mulyaningsih et al., 2023). Apart from that, several studies

with calculation results obtained a coefficient correlation (r) of 0.960, Which implies a healthy lifestyle and overall level of physical fitness in junior high school students (Arfianto & Sugiyanto, 2020).

The results of this study show that there is a positive and significant relationship between a healthy lifestyle and the level of physical fitness; someone who has good physical fitness has the habit of living a healthy life (Abhinaya & Wahjuni, 2022; Aprilia & Januarto, 2022; Bangun, 2019). So, this research has proven a positive and significant relationship between physical fitness and a healthy lifestyle in junior high school students in Cimahi City 6.

Conslusions

The research result concludes that there is a strong and positive correlation between physical fitness and leading a healthy lifestyle, with the degree of relationship falling into the medium group based on the research findings. Therefore, the higher the physical fitness, the higher the level of healthy lifestyle possessed by junior high school students and vice versa.

This research provides suggestions for other researchers. All the limitations of this research will be more concrete if further research is conducted regarding the relationship between physical fitness and the level of healthy lifestyle, taking into account the large number of samples. As for students, they can improve healthy lifestyles in the surrounding environment and can improve physical fitness by utilizing existing information media; it is hoped that the physical fitness carried out by students can improve and change healthy lifestyles for the better; lastly, for institutions, they can provide counseling for students at school about health specifically and increasing reading material about health.

Authors' contributions

MNA is responsible for data compilation, analysis, article conception, writing, and revision. SH and AS are responsible for article conceptualization and strict and critically revised manuscripts. All authors read and approved the final manuscript.

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Competing interests

The authors declare no competing interests.

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