

Analysis of Physical Fitness of Students Living in Boarding Schools and Non Boarding Schools

Nisavinea Dintuqatih[✉], Setya Rahayu², Fajar Awang Irawan³

^{1,2,3} Universitas Negeri Semarang

Article Info

History Articles

Received:
January 2025
Accepted:
February 2025
Published:
March 2025

Keywords:

*Physical Fitness, Islamic
Boarding School Students,
Islamic Boarding Schools*

Abstract

This research aims to analyze the physical fitness of students who live in Islamic boarding schools and non-Islamic boarding schools. The research method used in this research is a quantitative approach with a survey design. The research subjects used in this research were MA Matholi'ul Huda Bugel Kedung Jepara students. The sampling technique uses *total sampling*. Data collection by observation, tests and documentation. Quantitative data analysis consisted of normality tests, hypothesis testing using SPSS version 26 software. The results of the research showed that the physical fitness level of all female students was in the good category. The Physical Fitness Score of the Non-Pottage TKPN = 378.53 is higher than that of the Pondok Group which is = 336.51. The limitation of this research is that it only involves MA Matholi'ul Huda Bugel Kedung Jepara female students, so the results cannot be generalized to all madrasa female students or schools in other areas. Based on the research results and existing limitations, the recommendation for further research is sample expansion, with a larger and more diverse sample from various madrasas or schools in other areas to increase the generalization of the research results. Then physical activity, taking more detailed and comprehensive measurements regarding the daily physical activity carried out by female students, both at the boarding school and outside the boarding school. Develop and test fitness programs to be implemented in Islamic boarding schools and schools to improve female students' physical fitness and conduct long-term research to see changes in female students' fitness and the factors that influence them.

Keywords: Physical Fitness, Islamic boarding school students, Islamic boarding school

© 2018 Universitas Negeri Semarang

[✉]Address correspondence:

Author Correspondence Address
E-mail: (first author's email address)

p-ISSN 2252-648X

e-ISSN 2502-4477

INTRODUCTION

Physical fitness is what supports human physical activity in carrying out work and moving around. An individual who is physically and physically fit will be able to carry out physical activities well compared to someone who is not physically and physically fit (Natal, 2022) . Physical fitness is basically a need for every human being in their life so that their physical condition and health are maintained well (Rahayu et al., 2015) .

Physical fitness is needed by everyone, whatever their activity and profession because with a good level of physical fitness, a person will be able to carry out their activities well (Anwar et al., 2015) . One way to improve physical fitness is by doing exercise regularly, measurably, programmed and systematically. Someone who has good physical fitness will avoid the possibility of injury when doing heavier physical activities or sports.

Currently at MA Matholi'ul Huda Bugel Kedung Jepara, the problem experienced is that students are less enthusiastic and lazy to do sports actively. There are physical education subjects at school but only once a week for approximately 2 hours at each meeting. Children are more interested in playing electronic games such as online games, gadgets and other electronic games. Children feel very comfortable playing this game without feeling bored for a long time.

When learning takes place there are students who feel sleepy, complain, and are not enthusiastic when theoretical and practical learning takes place. Usually this happens in the afternoon after the first or second break and 1 hour before the bell rings. This is an indication of poor fitness quality. With this problem, researchers consider it necessary to examine students' fitness levels. This was confirmed from interviews with physical education teachers that the school did not yet have data on student fitness and had never implemented standard fitness tests on students due to limited school facilities and infrastructure.

It is important for students to engage in physical activity, maintain good sleep patterns, and avoid sedentary behavior that can cause

health problems. Another study entitled " The Relationship between Physical Activity and Sleep Quality in Students of the Darul Hijrah Puteri Islamic Boarding School" found that the majority of teenagers experienced problems with the quality of their sleep. Can be caused by irregular physical activity.

It is important for female students to have good physical fitness to help them participate in learning with enthusiasm and high motivation in order to get maximum learning results. In order to obtain good physical fitness, you need to do regular physical activity and exercise. As Giriwijoyo (2017) said, do exercise with a frequency of three to five times a week. In relation to increasing students' academic achievement, doing physical activity will improve their cognitive abilities, memory and so on (Karim, 2018).

Based on a preliminary study which was carried out by researchers on November 5 2023 on MA Matholi'ul Huda Bugel Kedung students Jepara using the interview method on 10 female students who were taken randomly. That 10 female students stated that each individual must take part in one extracurricular activity. 8 female students stated that they often felt tired, especially at night and in the morning. The fatigue experienced by the female students was caused by the busy activities at the boarding school. The female students still haven't slept because some of them still have other activities such as doing schoolwork, cleaning their beds and at 03.15 in the morning they wake up to attend the tahajjud prayer and continue reciting the Koran until dawn.

It is important for female students to have good physical fitness to help them participate in learning with enthusiasm and high motivation in order to get maximum learning results. In order to obtain good physical fitness, you need to do regular physical activity and exercise. As Giriwijoyo (2017) said, do exercise with a frequency of three to five times a week. In relation to improving students' academic achievement, doing physical activity will improve cognitive abilities, memory and so on (Colmenero, 2014).

The aim of this research is to analyze the physical fitness of Madrasah Aliyah Matholi'ul Huda Bugel Kedung Jepara students who live in Islamic boarding schools and non-Islamic boarding schools .

METHOD

The research method used in this research is a survey with a quantitative approach. The sample used was all 725 MA Matholi'ul Huda Bugel Kedung Jepara female students with a distribution from classes X, XI and XII from the Mathematics and Natural Sciences, Religion and Social Sciences programs.

The instrument used in this research was the Indonesian Student Fitness Test (TKPN) for students aged 15-19 years. The data collection uses physical fitness tests including measurements of Body Mass Index, V-sit and reach, Squad thrust, Sit ups, and the PACER test. The data analysis technique uses correlation, including prerequisite tests for normality and homogeneity analysis and hypothesis testing.

The research procedure measures the level of physical fitness for Body Mass Index using kilos and meters, for the V-sit and reach test using a meter, for Sit ups using a time unit of 60 seconds, Squad thrust using a time unit of 30 seconds and for the Pacer test using a level .

RESULTS AND DISCUSSION

Results

The physical fitness level of MA Matholi'ul Huda Bugel Kedung Jepara female students is on average in the good category. Factors that influence poor physical fitness results are that female students do not do less physical activity or exercise, because exercise is an important factor to support physical fitness. The results of research data analysis can be presented as follows:

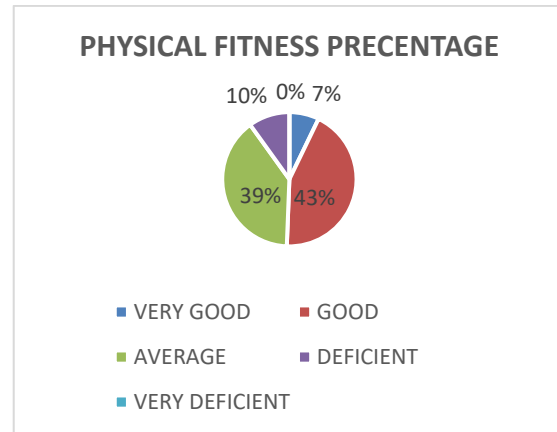


Figure 1. Percentage of Physical Fitness of MA Matholi'ul Huda Bugel Students

In the data above, it is known that Physical fitness is divided into categories of very good, good, fair, poor and very poor. MA Matholi'ul Huda Bugel Kedung Jepara female students had a very good physical fitness level of 52 (7%). The good category was 315 (43%). The sufficient category was 72 (10%). The physical fitness level of all female students is in the good category.

Descriptive Statistics			
	N	Mean	Std. Deviation
TKPN Pondok	268	2.9218	0.7138
TKPN Non Pondok	457	2.9992	0.7081

Table 1. Descriptive Statistics of TKPN Physical Fitness

From the results above, it can be seen that the Indonesian Student Fitness Test at Pondok has an average score of 2.9218 with a standard deviation of 0.71. Meanwhile, the results of the Indonesian Student Fitness Test at Non-Islamic Boarding Schools have an average value of 2.9992 with a standard deviation of 0.70. Overall differences, the two groups have differences in sample size, average value, and standard deviation, these differences are not too big. The TKPN Non Pondok group tends to have a higher average score and a smaller spread of scores compared to the TKPN group in Pondok.

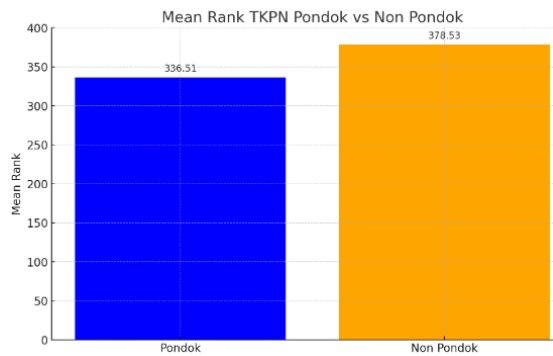


Figure 2. Pondok and Non-cottage TKPN

Based on the test results using Mann-Whitney, it can be seen that there is a significant difference in the TKPN scores of the cottage and non-cottage groups. This finding is proven by the sig value = $0.009 < 0.05$, and based on the mean rank value it can be seen that the non-cottage TKPN value = 378.53 is higher compared to the cottage group of = 336.51

Discussion

Physical fitness is a physical condition related to the ability and ability to carry out activities optimally and efficiently (Paryanto, 2013). The ability in physical fitness that is meant according to (Nayak, 2016) is the ability of a person's body to carry out daily physical work without causing significant fatigue. The meaning of without causing fatigue which means in the sense of physical fitness itself according to (Ogilvie, 2011) is the ability of a person's body to still be able and have sufficient effort and energy after a person has carried out work or activities and can still enjoy his free time and still be able to carry out work. others are urgent.

Sport is a physical activity that aims to keep the body fit and if exercise is made into a routine, it will make it easier for the body to carry out daily activities (Irawan et al., 2018). When carrying out physical activities, exercise certainly has its own level of load. The level of sports activity load must be appropriate to a person's age and physical condition so that it can be well controlled (Irawan et al., 2021).

Physical fitness has benefits in building muscle strength and endurance, increasing aerobic endurance, increasing endurance, burning calories, reducing stress, and increasing

passion for life. For every individual, it is important to have a level of fitness that allows them to carry out life activities optimally (Abdurrahim & Hariadi, 2018). A person's physical fitness can be influenced by a person's daily physical activity and lifestyle. The physical fitness level of MA Matholi'ul Huda Bugel Kedung Jepara female students is on average in the good category. Factors that influence poor physical fitness results are that female students do not do enough physical activity or exercise, because exercise is an important factor to support physical fitness because it affects cognitive, psychomotor and affective development (Suhartoyo et al., 2019)

This research shows that there is a difference in the level of physical fitness between boarding school students and non-boarding school students. With different backgrounds of female students' activities, there are differences in their daily activities, female students who board at Islamic boarding schools have less good physical fitness because as stated by Al-Jamil et al., (2018) that the activities of Islamic boarding school students are different from those of female students. at school in general. Islamic boarding school students have to read the Koran all day long, afternoon and evening, and even have to get used to praying at night, not to mention coursework in class, which results in heavier physical work (Ani, 2019).

The better the student's physical fitness, the better his performance and achievement results will be because it is supported by his fit body condition. A person is said to be fit according to (Rudi, Rima & Arif, 2021), namely if a person is able to carry out or carry out daily activities without experiencing significant fatigue, so that the body still has energy reserves to carry out additional activities. From this it can be understood that physical fitness is an important aspect that students must maintain because it is related with condition student That yourself influential on activity every day.

Low levels of physical activity increase the risk of obesity and many other chronic diseases, including coronary heart disease, diabetes, and colon cancer (Ogilvie et al., 2011).

Good, correct, measured and regular physical activity and exercise reduces the risk of non-communicable diseases and improves health and fitness. Sport is a physical activity carried out for the purposes of fitness, health, achievement and education. Regular physical activity has health benefits for all ages (Amtarina, 2017).

Some research that can be used as a comparison in this study is research by Al-Jamil et al. (2018) who analyzed the physical fitness level of Islamic boarding school students in Bengkulu City. They found that physical activity in Islamic boarding schools is different from public schools and can affect students' physical fitness. Then research by Andriani & Herawati (2016) regarding the relationship between body mass index and physical activity with maximum oxygen volume shows the importance of regular physical activity for health. Research by Karim et al. (2018) regarding the relationship between physical activity and the degree of hypertension in outpatients at the Tagulandang Health Center, shows that regular physical activity can have a positive effect on physical health.

The limitations of this research can be identified, firstly, the limited sample, the research only involved female students at MA Matholi'ul Huda Bugel Kedung Jepara, so the results cannot be generalized to all female madrasah students or schools in other areas. Then there are the facilities and infrastructure at the school that can influence fitness test results and the absence of detailed measurements regarding variations in daily physical activity carried out by female students both inside and outside the Islamic boarding school.

Based on the research results and existing limitations, the recommendation for further research is firstly expanding the sample, where a larger and more diverse sample from various madrasas or schools in other areas is to increase the generalization of the research results. The second measurement of physical activity is to carry out more detailed and comprehensive measurements regarding the daily physical activity carried out by female students, both at the Islamic boarding school and outside the Islamic boarding school. Then develop and test a fitness

intervention program that can be implemented in Islamic boarding schools and schools to improve female students' physical fitness. Next, conduct longitudinal research to see changes in female students' physical fitness over a longer period of time and the factors that influence it.

These recommendations can help overcome the limitations of current research and provide deeper insight into the factors that influence the physical fitness of female students in Islamic boarding schools and non-Islamic boarding schools. Physical activities that can be done to improve physical fitness while at school or at the cottage include light exercise or stretching between lessons, taking advantage of break time to walk or light exercise such as jumping rope or push-ups. If there are extracurricular sports, this also affects physical fitness. Female students can try traditional sports such as rounders, cycling or running in their free time. This physical activity can be done regularly and consistently to get maximum results.

CONCLUSION

Based on the research conducted, it can be concluded that there is a significant difference in the Indonesian Student Fitness Test (TKPN) scores between female students living in Islamic boarding schools and non-Islamic boarding schools. The results of the Mann-Whitney test show a significant value of 0.009 which is smaller than 0.05, indicating that there is a significant difference. In detail, the mean TKPN rank value of non-Islamic boarding school students is 378.53, higher than that of Islamic boarding school female students who have a mean rank value of 336.51. This shows that female students who live in non-Islamic boarding schools have a higher level of physical fitness compared to female students who live in Islamic boarding schools. The difference in fitness levels between female students in Islamic and non-Islamic boarding schools is likely due to differences in daily routines and priorities. Islamic boarding schools often focus more on religious activities, leaving less time for physical exercise, while non-Islamic schools may offer more opportunities for sports and physical activities. This means

students in non-Islamic schools are more active, leading to higher fitness scores. For example, a girl in an Islamic boarding school might spend most of her day studying and praying with little time for exercise, whereas a girl in a non-Islamic school might have regular gym classes and sports, making her more physically fit.

REFERENCES

- Al-Jamil, AH, Sugiyanto, S., & Sugihartono, T. (2018). Analysis of Physical Fitness Levels of Islamic Boarding School Students in Bengkulu City. *Kinesthetics*, 2(1), 118–125.
- Al-Jamil, S., Yulita, A., & Rahayu, M. (2018). Analysis of Physical Fitness Levels of Islamic Boarding School Students in Bengkulu City. *Indonesian Journal of Physical Education*, 14(2), 113-125.
- Andriani, L., & Herawati, N. (2016). Relationship between Body Mass Index and Physical Activity with Maximum Oxygen Volume (VO₂ Max) in Adolescents. *Journal of Public Health*, 11(3), 221-230.
- Ani, H., & Rustam, R. (2019). The Character Phenomenon of Pontianak City High School Adolescents and Studies on Multicultural Rational Emotive Behavior Therapy (Rebt). *Emphaty Cons-Journal of Guidance and Counseling*, 1 (1), 8-20.
- Anwar, AC, & Rahayu, S. (2015). The Influence of Wok Dhor Traditional Sports on the Physical Fitness of Students Aged 13-15 Years at the Roudlatut Thalibin Rembang Islamic Boarding School. *Journal of Sport Science and Fitness*, 4 (4), 23-28.
- Amtarina, R. (2017). The benefits of regular physical activity on improving cognitive function in patients with mild cognitive impairment. *Journal of Medical Sciences*, 10(2), 140.
- Colmenero, M. H., Vicente, G. F., & Ruiz, J. R. (2014). Assessment of physical fitness in military and security forces: a systematic review. *European journal of human movements*, (32), 3-28.
- Giriwijoyo, S & Zafar Sidik, D. (2012). Sports Health Sciences. Bandung; PT Teen Rosdakarya
- Irawan, FA, Romadhoni, S., Permana, DFW, Billah, TR, & Hadi, H. (2021). Be fit bye fat as a method of increasing the level of physical fitness of Pertamina MOR IV Semarang employees. *JOSSAE (Journal of Sport Science and Education)*, 6 (1), 67-73.
- Irawan, FA, & Sandiyudha, TB (2018). Development of Push-Up Counting Equipment as an Alternative to Physical Fitness Devices. *Indonesian Sports Science Media*, 8 (1), 26-30.
- Karim, A., Purnamasari, R., & Nugroho, T. (2018). Relationship between physical activity and degree of hypertension in outpatients at Tagulandang Community Health Center. *Journal of Public Health Sciences*, 9(4), 198-207.
- Karim, N.A., Onibala, F., & Kallo, V. (2018). The Relationship Between Physical Activity and the Degree of Hypertension in Outpatients in the Working Area of the Tagulandang Community Health Center, Sitiro Regency. *Nursing E-Journal*, 6(1), 1–6.
- Mubarok, H., Rahayu, S., & Hidayah, T. (2015). Analysis of the physical fitness level profile of Anker FC futsal players in 2014. *Journal of Sport Science and Fitness*, 4 (3).
- Christmas, YR (2022). Profile of Physical Fitness Levels of Middle School Students during the Pandemic. *Penjakora Journal*, 9 (1), 62–70.
<https://doi.org/10.23887/penjakora.v9i1.46546>
- Nayak B, S., Miranda, S.A., Fitzrol, O. jon B., Anthony, L., Rao S, G., & Aithal P, A. (2016). The Impact of Physical Activities on the Academic Performance of Medical Students. *Online Journal of Health and Allied Sciences*, 15(2), 1- 4.
- Sofiah, S., Rachmawati, K., & Setiawan, H. (2020). The relationship between physical activity and sleep quality among female students at the Darul Hijrah Puteri

- Islamic Boarding School. *World of Nursing: Journal of Nursing and Health*, 8 (1), 59.
- Suhartoyo, T., Budi, DR, Kusuma, M. NH, Syafei, M., Listiandi, A. D., & Hidayat, R. (2019). Identification of Physical Fitness of Middle School Students in the Highlands Area of Banyumas Regency. *Physical Activity Journal*, 1(1), 8. <https://doi.org/10.20884/1.Paju.2019.1.1.1995>
- Ogilvie, D., Lamb, K.E., Ferguson, N.S., & Ellaway, A. (2011). Recreational physical activity facilities within walking and cycling distance: Sociospatial patterning of access in Scotland. *Health and Place*, 17(5), 1015–1022.
- Paryanto, R., & Wati, IDP (2013). Efforts to Improve Students' Physical Fitness Through Physical Education. *Untan Journal of Education and Learning*, 2(5), 143–154.