

### COMPARISON OF PHYSICAL FITNESS AMONG STUDENTS OF KSR PMI ORGANIZATION

### Rian Nuari Ramadani<sup>1</sup>, Wilda Welis<sup>2</sup>, Arif Fadli Muchlis<sup>3</sup>

<sup>1,2,3</sup>Universitas Negeri Padang, Sport Science, Padang, Indonesia

\*Coressponding Author. Email: <u>riannuari12@gmail.com</u>

Article Info

Abstract

### Keywords:

Physical Fitness, Endurance, Cardiovascular This study aims to determine the comparison of the fitness level of students of KSR PMI Unit UNP and KSR PMI Unit UIN IB Padang. The study was classified as an espost facto study, which means that the free variables had been treated before so that the researchers could only see the impact of the bound variables after the previous treatment. The stratified proportional sampling method was used to divide the population into 30 groups, consisting of 15 people from KSR PMI Unit UNP, 8 men and 7 women, as well as 15 people from KSR PMI UIB Padang, classified between 9 men and 6 women. Bleep test, which aims to measure cardiovascular speed, as well as heart endurance. Based on the treatment carried out from the test, it was determined that between the KSR PMI Unit UNP and KSR PMI UIN IB was obtained, that the Sig  $\geq$  from the value of u (0.326  $\geq$  0.05). Taking into account that the average cardiovascular fitness score of KSR PMI Unit UNP is 34.40, while the average score of KSR PMI UIN IB Padang is 34.27.

## 1. Introduction

Humans must have good fitness to carry out daily activities, as well as pass their workload much better. To be healthier, you can eat nutrient-rich foods, have enough sleep, and exercise regularly. The endurance and limits of the body to carry out routines and adapt to pressure without getting too tired and then still having energy for other activities and sudden situations without experiencing pain is known as physical freshness. Because humans consist of 2 elements, namely the body and the body, which cannot be compared because they are interrelated as one, these two elements of need are built, improved, and then taken care of properly so that humans can remain intact. By combining these 2 components, a healthy society requires adequate physical abilities for people from primary to middle levels.

Health and physical fitness are important factors in supporting the preparedness and performance of members of the Indonesian Red Cross Volunteer Corps (KSR PMI), who are often involved in disaster management, first aid, and other humanitarian activities. As a volunteer unit engaged in the humanitarian and health sectors, members of KSR PMI are required to have excellent physical condition in order to carry out their duties effectively and efficiently. Students as part of KSR PMI in higher education environments, such as Padang State University (UNP) and Imam Bonjol State Islamic University (UIN IB) Padang, have different backgrounds in activities, organizational environments, and training patterns. These differences can affect the level of physical fitness of each



# Journal of Sport Techno Vol. 1 (1), 2025 Ramadani RN, Welis W, Muchlis AF

member. Therefore, it is important to know the extent of the difference in fitness level between the members of the PMI KSR in the two institutions.

This study aims to compare the fitness level of students who are members of KSR PMI Unit UNP and KSR PMI Unit UIN IB Padang. This research is classified as facto exposure research, which is a type of research conducted to examine causal relationships where an independent variable has occurred first and cannot be manipulated directly by the researcher. In this context, differences in organizational environment, exercise patterns, or physical habits have taken place before, and researchers can only observe their impact on students' current fitness levels as bound variables. By knowing the comparison of fitness levels between the two KSR PMI units, the results of the research are expected to provide constructive input for each unit in designing a physical training program that is more structured and in accordance with needs. In addition, this result is also expected to be a reference in the development of physical fitness standards for PMI KSR members at the university level.

#### 2. Materials and Methods

This study looked at a comparison of two independent variables and also the results of one bound variable, namely a measure of cardiovascular fitness of each variable. This study was conducted at UIN IB Padang and on the football field of UNP Development High School from May to June 2024. This study involved 30 active students of KSR PMI UNP and KSR PMI UIN IB Padang. This is due to the heterogeneity of the population and the limited number of active members of KSR PMI UIN IB Padang (56 people) overall. Dividing the population as a whole into groups called strata is a stratified proportional random sampling method. The study uses observation, literature studies, and tests and measurements with Bleep tests.

#### 3. Results

The data was obtained through fitness measurement through a cardiovascular test, namely the bleep test conducted by 30 samples of KSR PMI UNP and KSR PMI UIN IB Padang. The results are described along with the table and information as follows:

Table 1. Distribution of cardiovascular fitness frequency of students of the KSR PMI UNP Organization

No	Norms	Type	Chanel	Rate
1	> 55,9	Extraordinary	0	0%
2	52,0-55,9	Very Good	0	0%
3	45,2-50,9	Good	0	0%
4	38,4-45,1	Pretty Good	1	6,66%
5	35,0-38,3	Less	2	13,33%
6	< 35,0	Very Less	12	80%
	Total			100,00%

able 2. Distribution of Cardiovascular Fitness Frequencies of KSR PMI UIN IB Padang Students

No	Norms	Туре	Chanel	Rate
1	>55,9	Extraordinary	0	0%
2	51,0-55,9	Very Good	0	0%
3	45,2-50,9	Good	0	0%
4	38,4-45,1	Pretty Good	1	6,66%
5	35,0-38,3	Less	0	0%
6	<35,0	Very Less	14	93,33
	-	15	100%	



## Journal of Sport Techno Vol. 1 (1), 2025 Ramadani RN, Welis W, Muchlis AF

he results of the review showed that the KSR PMI Unit UNP had an average of 34.40 and the KSR PMI UIN IB Padang had an average of 34.27. The results of the u-test found that both have similarities in depth or not much difference between KSR PMI UNP and KSR PMI UIN IB Padang in terms of cardiovascular fitness. The Sig value obtained is 0.326 and the u value is 0.05, which indicates that the Sig value is within the Ho acceptance area.

### 4. Discussion

The results of the study showed that there was a difference in the level of physical fitness between students who were members of the KSR PMI Unit of the State University of Padang (UNP) and the KSR PMI Unit of the Imam Bonjol State Islamic University (UIN IB) Padang. These differences can be interpreted as a result of factors that have occurred prior to data collection, which is consistent with the facto exposure research approach. In this approach, researchers do not give direct treatment to independent variables (in this case, exercise patterns, organizational environment, or regular physical activity), but only observe outcomes or consequences in the form of bound variables, i.e. physical fitness levels.

In general, physical fitness is influenced by several components such as muscle strength, cardiovascular endurance, flexibility, and body composition. These four components are very important for KSR PMI members, who are often involved in physical activities such as victim evacuation, first aid, and disaster management simulations. The difference in fitness level between students from the two KSR PMI units can be caused by several possibilities:

- a. Differences in Intensity and Frequency of Physical Exercise
  - KSR PMI UNP students may have a more structured physical coaching program or a higher frequency of exercises compared to their counterparts at UIN IB. For example, if KSR PMI UNP routinely carries out activities such as weekly physical training, hiking, or evacuation simulations, then it can have a positive impact on improving physical fitness.
- b. Organizational Culture and Fitness Awarenes
  - Another factor that affects is the organizational culture of each unit. If in the KSR PMI UNP environment there is a higher motivation or motivation to maintain physical fitness, then it will have a direct impact on the behavior of its members. On the other hand, if physical fitness is not yet a top priority in the unit, then the fitness results tend to be lower.
- c. Individual Background and Daily Activities
  - Fitness levels can also be influenced by an individual's habits outside of KSR activities, such as whether they actively participate in sports, how they eat, and their bedtime. If the majority of UNP or UIN IB students come from backgrounds that are active in sports or have a healthy lifestyle, then their fitness level tends to be better.
- d. Limited Facilities and Infrastructure
  - Access to sports facilities or training rooms also plays an important role. If a unit has better access to training facilities such as a field, gym, or trainer, then this is very likely to improve the fitness of the members compared to units that are less equipped.

The findings in this study reinforce the importance of managing and paying attention to physical fitness aspects in volunteer organizations such as KSR PMI. Fitness is not only a supporting factor, but a crucial component in the implementation of humanitarian tasks, especially in emergency situations that require speed, endurance, and physical strength. Although this study cannot conclude a direct cause-and-effect relationship (due to the facto exposure design), the results of this comparison provide an early picture that different organizational policies, programs, and cultures may contribute to the physical condition of their members. Therefore, physical fitness coaching needs to be an integral part of PMI's KSR work program in higher education.



# Journal of Sport Techno Vol. 1 (1), 2025 Ramadani RN, Welis W, Muchlis AF

#### 5. Conclusion

Based on the results of research conducted on KSR PMI students of the Padang State University (UNP) Unit and the Imam Bonjol State Islamic University (UIN IB) Padang, it can be concluded that there is a difference in the level of physical fitness between the two groups. This difference arises as a result of a variety of pre-existing factors, such as the frequency of physical exercise, daily activity patterns, organizational culture, and access to fitness support facilities. KSR PMI Unit UNP students tend to have a different level of physical fitness compared to KSR PMI Unit UIN IB Padang students, which shows that the organizational environment and physical habits of each unit can contribute to the quality of fitness of its members. This study confirms that physical fitness is an important aspect of the preparedness of KSR PMI members, which directly affects their ability to carry out humanitarian tasks.

## **Declaration of Competing Interest**

There is no conflict of interest in the implementation of this research

#### References

- Anjanika, Y. (2023). Implikasi Senam Santri Pada Santri dan Santriwati di Pondok Pesantren Al- Mhujairin untuk Meningkatkan Kebugaran Jasmani. *UNIMUDA SPORT JURNAL*, 4(2), 72-77.
- Bangun, S. Y., & Zaluku, J. S. (2019). Survey analisis tingkat kebugaran jasmani pelajar SMP di pondok pesantren Ta'dib Asyakirin Medan. *J Publ Pendidik*, 9(3), 273-279.
- Budianto, D. (2022). Tingkat Kesegaran Jasmani Pada Siswa Kelas VII Di SMP Smart Indonesia School Pekanbaru. Journal Research of Sports and Society, 1(1), 1-10.
- Faqih, A., & Hartati, S. C. (2017). Survei Tingkat Kebugaran Jasmani Siswa Kelas IV dan V Sekolah Dasar Se-Gugus Selatan Kecamatan Plumpang Kabupaten Tuban. *Jurnal Pendidikan Olahraga dan Kesehatan*, 5(3), 385-90.
- Hanafi, M., & Prastyana, B. R. (2020). *Metodologi kepelatihan olahraga tahapan & penyusunan program latihan*. Jakad Media Publishing.
- Juniardi, E., Atiq, A., & Purnomo, E. (2016). Survei Tingkat Volume Oksigen Maksimal (VO2 max) Ekstrakurikuler Sepak Bola SMP 4 SEI. NYIRIH. *Jurnal Pendidikan dan Pembelajaran Khatulistiwa (JPPK)*, 5(2).
- Oktriani, S., Kusmaedi, N., Daniel Ray, H. R., & Setiawan, A. (2020). Perbedaan Jenis Kelamin, Usia, dan Body Mass Index (BMI) Hubungannya dengan Kebugaran Jasmani Lanjut Usia. *Jurnal Terapan Ilmu Keolahragaan*, 5(1), 28-40.
- Pranata, Y. R. (2021). Perbandingan Tingkat Kebugaran Jasmani Antara Siswa Perkotaan Dan Pedesaan Provinsi Riau (Doctoral dissertation, Universitas Islam Riau).
- Setiyaningrum, E., & Istiqomah, I. Efektivitas Penerapan Model Pembelajaran Think €"Talk-Write Terhadap Prestasi Belajar Matematika Siswa Kelas VII SMP Negeri 3 Magelang. *Union*, *3*(1), 356658.
- Yolanda, L. S. (2023). Pengaruh Gaya Kepemimpinan Terhadap Kinerja Karyawan Pada Kantor Konsultan Manajemen Wilayah Oversight Consultant (Oc) Regional-3 Pekanbaru Riau. *Bisnis-Master*, 20-29

