

**ANALYSIS OF KARATE ATHLETE PHYSICAL CONDITION TEST  
RESULTS ON PPLP ATHLETES OF GORONTALO  
PROVINCE IN 2022 AND 2023**

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**Abstract**

*The recommendation of this research is to obtain differences in the results of physical condition tests that focus on kata number karate and kumite athletes from PPLP Gorontalo Province and to find out the percentage of physical condition test participants from kata number karate and kumite athletes from PPLP Gorontalo Province athletes. Apart from that, this research is an evaluation of the results of the number kata and kumite karate tests every year from 2022 to 2023. This research shows the results of the physical tests on kata number karate and kumite of female PPLP athletes from Gorontalo province in 2022 - 2023 PPLP Gorontalo Province, namely Test The 20 meter run in 2022 - 2023 experienced an average increase of 0,33%, the Bleep test in 2022-2023 experienced an average increase of 0,49%. the 300m running test in 2022-2023 experienced an average increase of 11,70%, the Sit up test in 2022 - 2023 experienced an average increase of 19,75%, the Push up test in 2022 - 2023 experienced an average increase of 125 .64%. Meanwhile, the results of the physical tests for karate athletes, kata numbers and kumite for PPLP male athletes in Gorontalo Province for 2022 - 2023 PPLP Gorontalo Province, namely the 20 meter running test from 2022 to 2023, experienced an increase of 2,62% on average, Bleep test in 2022-2023 will experience an average increase of 205,62%. the 300m running test in 2022-2023 experienced an average increase of 8,04%, the Sit up test in 2022-2023 experienced an average increase of 26.40%, the Push up test in 2022 -2023 experienced an average increase of 205 ,62%. So there will be changes in the physical condition test results of Gorontalo Province PPLP from Gorontalo Province PPLP in 2022 - 2023. The most prominent changes in test results are in the results of the 20m run test, bleep test, 300m run, Sit-ups and Push-ups.*

**Keywords:** Kata, Kumite, Physical Condition, PPLP Gorontalo

Submitted : 17<sup>th</sup> of April 2024

Accepted : 03<sup>th</sup> of July 2024

Published : 05<sup>th</sup> of July 2024

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DOI <http://dx.doi.org/10.31851/hon.v7i2.15434>



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## INTRODUCTION

Sport is a regular and systematic physical activity that has various kinds of movements that are often carried out by groups in society, and is contested for various age categories. According to (Purnomo et al., 2020) Sports activities are very fun and entertaining. According to (Özcan et al., 2018) Exercise really helps a person become physically and spiritually healthy which ultimately forms good physical potential. In addition, sport as physical fitness includes games, races, matches and physical activities that are not intensified to obtain optimal reactions, wins and achievements (Batra et al., 2021). As is known, Karate is a martial art that originates from Japan. The martial art of karate was brought to Japan via Okinawa. This martial art was first called "Tote" which means something like "Chinese Hand". When karate entered Japan, Japanese nationalism at that time was at its peak, so Sensei Gichin Funakoshi changed the Okinawan kanji (Tote: Chinese Hand) in the Japanese kanji to "karate" (Empty Hand) to make it more easily accepted by Japanese society. Karate consists of two kanji. The first is "Kara" and means "empty", the second "te" means "hand". The two kanji together mean "empty hand".

In Japan, the organization that organizes the sport of karate throughout Japan is JKF. The organization that accommodates karate throughout the world is the WKF (formerly known as WUKO - World Union of Karatedo Organizations). There is also the ITKF (International Traditional Karate Federation) which organizes traditional karate. The function of JKF and WKF is primarily to reinforce karate which is without direct contact, in contrast to the Kyokushin or Daidojuku styles which are direct contact. October 20, 1957 became an important moment in the history of the JKA and the world of Japanese karate. The city of Tokyo was chosen to host the first competition in Japan. The international world was amazed by Japan's ability to hold a major event only 12 years after losing the war. To improve sports performance, especially in the sport of karate, of course you need training that can improve all components of physical condition, because ability to be in prime physical condition greatly determines the level of performance. As

Sajoto (1988:57) said, "physical condition is one of the prerequisites that is really needed in efforts to improve an athlete's performance, it can even be said to be the basic starting point for starting a sports achievement". According to Harsono (1993:1) that "the physical conditions referred to are strength, endurance, flexibility, agility, speed and power". The need for physical conditions cannot be the same for each sport, because each sport has its own movement characteristics. This will relate to the methods and forms of training that will be carried out so that the form of training carried out is in accordance with the needs of the sport in question. Karate as a sport has developed into a competitive sport that has diversity both in movements and in terms of the artistry of the movements. In the martial sport of karate there are two types of movement components that are competed, namely kata and kumite. Movements in karate training require gentle but deadly techniques, for example the technique for kicking an opponent which can be optimized with proper training to get maximum results. One of the karate techniques is the kick, kicks are used to hit targets that cannot be reached by punches, among the kicking techniques in Mawashi Gery Jodan you need to pay attention because this technique, if it hits the right target in the head area, will produce 3 points.

If the athlete's physical condition is in a low condition, it will not support performance. By (PRAMONO TEGAR, 2019). To achieve sporting achievements requires elements of physical condition. According to (Sujiono, 2021) explains that physical condition is a component that cannot be separated, both repair and maintenance. The physical components that coaches must pay attention to in the process of developing short distance running performance are endurance, strength, flexibility, speed and power.

According to (Beck & Grabowski, 2018) In physical training, you must be able to train systematically, regularly, and improve it by preparing training programs that are effective and efficient, as well as following various developments in training principles and training methods that are suitable for athletes. The training program has the aim of increasing physical, mental and technical potential (Febriyanto et al., 2016). The goal of this training program is to have long-term

progressive improvements for quality improvement. This research focuses on PPLP Gorontalo kata and kumite athletes to understand the changes made to physical tests with fixed test items each year. To understand the improvement in the results of POPNAS 2023. PPLP Gorontalo has a very good opportunity to develop the potential for superior seedlings and there are achievements that develop from year to year as the basis for this research material. Based on this research, PPLP Gorontalo is expected to be able to understand the results of athletes' physical condition tests from 2022 to 2023. Therefore, these results can be of concern to athletes so that the next POPNAS will have a satisfactory ranking.

From the results of the information above, it is important for athletes to have a good physique. Due to support for athlete performance. So, to understand an athlete's physical condition, tests and measurements must be carried out to determine an athlete's physical condition as a reference for determining whether an athlete's performance is increasing or decreasing.

According to (widiastuti, 2015) Tests and measurements are a tool for collecting data or information about what you want to achieve". Tests are instruments or tools used to obtain information about athletes or objects. Tests and measurements are things that are often used together which of course has its own meaning. Tests are instruments used with the aim of obtaining information about individuals or objects, while measurement is the process of collecting information, where the process of collecting information is collected in the form of numbers. Tests and measurements themselves have the following objectives: determining status, classification within a group, selection, motivation, maintaining standards, mechanisms, introspection. and research interests. The physical requirements of each sport are different, so different tests and measurements are required in each sport. Tests and Measurements are a means of helping coaches, athletes and sports organizations to analyze the level of physical condition (Kemala, 2019).

Structured and regular tests and measurements will really help trainers to find out valid test data results, reliable test equipment needed, and competent examiners. According to (Paulus Hendro Titirloloby, 2021) Tests and

Measurements are one of the most important ways to support Indonesia's sporting achievements, especially in every city and district. The lack of athlete lab data results is a problem that exists in several cities and districts. There needs to be a change to that problem. To obtain reliable data requires measurement test equipment that has a reliable level of validity.

Based on the background information above, the author was inspired to carry out research taking existing data and developing it again, in the form of physical test results for PPLP Gorontalo kata and kumite athletes. It is hoped that this research will be able to understand the results of physical condition tests for PPLP Gorontalo kata and kumite athletes from 2022 to 2023. So that you can understand the training achievements

#### **Data collection technique**

Researchers collected data through the following tests:

1. Sprint 20M
2. Bleep Test
3. Run 300m
4. Sit up test
5. Push-up test

#### **METHOD**

This research uses quantitative research methods, what is meant by quantitative research is a type of research that uses data in the form of numbers as a tool to analyze information about what is known (Sugiyono, 2012). In this study, the researchers used an ex-post facto method, a method that uses secondary data. What is said to be secondary data is data that is used to review variables that occurred previously (Sriundy, 2015), or it can be concluded that secondary data is taking data that already exists.

Researchers processed the athlete's physical test data results, namely in 2022 and 2023. Researchers wanted to understand during these three years whether there were changes or even changes in the sport of karate. This study pays attention to the decrease and increase in physical components, including speed, endurance and strength,

According to Sugiyono (2010) a research variable is a characteristic or value of a person or object that has certain variations determined by the researcher to study it and draw conclusions.

## RESULTS

Ex-post facto methods are used to reprocess data. Using Microsoft\soft Excel, will display the average value and percentage, to understand changes in data from two different years.

**Table.1** Based on the annual average of female karate athletes

Average Test	2022	2023
Sprint 20 m	3,96	3,94
Bleep tes	33,99	34,16
Run 300m	68,91	60,81
Sit ups	37,1	44,4
Push ups	11,7	26,4

**Table 2.** Based on the annual average for male karate athletes

Average Test	2022	2023
Sprint 20 m	3,48	3,57
Bleep tes	43,98	46,13
Run 300m	52,92	48,67
Sit ups	41,67	52,67
Push ups	14,83	45,33

Based on table 1, it can be seen that from the description of the testing system, namely:

1. The average for the 20 meter running test in 2022 is 3.96 seconds in 2023 and the average in 2023 is 3.94 seconds. From these results it can be seen that from 2022 to 2023 the average 20 meter running time will increase.
2. The average Bleep Test in 2022 is 33.99, in 2023 it is 34.16. From these results it can be seen that from 2022 to 2023 the average VO2 Max will increase.
3. The average 300m run in 2022 is 68.91 seconds, in 2023 it is 60.81 seconds and the average time will increase accordingly.
4. The average Sit-up test in 2022 is 37.1 times, in 2023 it is 44.4 so there will be an increase.
5. The average Push-up test in 2022 is 11.7, in 2023 there will be an average of 26.4, so there will be an increase

Based on table 2, it can be seen that from the description of the testing system, namely:

1. The average for the 20 meter running test in 2022 is 3.48 seconds in 2023 and the average in 2023 is 3.94 seconds. From these results it can be seen

- that from 2022 to 2023 the average 20 meter running time will increase.
2. The average Bleep Test in 2022 is 43.98, in 2023 it is 46.13. From these results it can be seen that from 2022 to 2023 the average VO2Max will increase.
  3. The average 300m run in 2022 is 52.92 seconds, in 2023 it is 48.67 seconds and the average time will increase accordingly.
  4. The average Sit-up test in 2022 is 41.67 times, in 2023 it is 52.67 so there will be an increase.
  5. The average of the Push-up test in 2022 is 14.83. In 2023 there is an average of 45.33, so there is an increase.

### **Physical percentage of girls increases every year**

Based on the image, it can be seen that all the following tests:

1. In the 20 meter test in 2022-2023 the average increase was 0.33%.
2. Bleep tests in 2022-2023 experienced an average decrease of 0.49%.
3. The 300 meter test in 2022-2023 experienced an average increase of 11.70%.
4. The average Sit-up test in 2022 will increase by 19.75% on average
5. The average push-up test in 2022 will increase by 125.64% on average

### **Men's Physical Percentage increases every year**

Based on the image, it can be seen that all the following tests:

1. In the 20 meter test in 2022-2023 the average increase was 2.62%.
2. Bleep tests in 2022-2023 experienced an average decrease of 205.62%.
3. The 300 meter test in 2022-2023 will average an increase of 8.04%.
4. The average Sit-up test in 2022 will increase by 26.40% on average
5. The average push-up test in 2022 will increase by 205.62% on average

## **DISCUSSION**

The reference for an athlete's level of achievement can be seen from the athlete's physical condition. Physical training that is appropriate to the characteristics of the sport will have a good effect on improving performance. Physical training has the aim of increasing the athlete's abilities and potential as well as developing the athlete's biomotor abilities from standard to highest (Goodman et al., 2006). Physical components include speed, strength, coordination, balance and reaction. The test components used by rubber athletes are the 20 meter running test, bleep test, 300 meter run, sit up test and push up test.

Based on the table results, the 2022-2023 PPLP Gorontalo karate athlete in the sport of karate is the MFT that has experienced an increase every year on

average from 2022-2023. Then continued with the 30 meter running test, the results decreased from 2022-2023. Tests on Leg Muscle Strength show an improvement in the physical condition of karate athletes in 2022-2023 and 2021 PPLP Gorontalo karate branch is shown by the results of an increase in the average Bleep test from 2022-2023. Average improvement results from 2022-2023 in the 300 meter running test are shown with the results. Another test that shows an increase in the results of Gorontalo PPLP Sit-Up and Push-Up athletes in the Karate branch is shown by an average increase from 2022-2023.

## CONCLUSION

From the research results and discussion, the following conclusions can be drawn:

1. There are changes to the physical test results for female karate athletes in 2022-2023. The most prominent test results were in the Push-Up test, sit-up test and 300 meter test.
2. There are changes to the physical test results for men's karate athletes in 2022-2023. The most prominent test results are the Push-Up test, Bleep test, and sit-up test.

Based on the results of the research, discussions and conclusions have been described as follows:

1. Coaches are expected to be able to adjust the variety and weight of training based on the results of this research. Scheduled for these tests from 2022 - 2023 there are fluctuating results and lack of improvement.
2. Karate athletes must train according to the coach's instructions with enthusiasm and strong determination to achieve extraordinary results.
3. For the author, it is to explain and evaluate the results of research on the physical or performance of karate athletes in the area. So it can provide insight and experience to understand the athlete's abilities.

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