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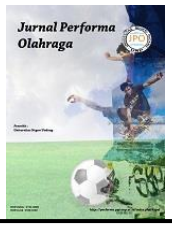

ANALYSIS OF PHYSICAL CONDITION TEST OF ATHLETES IN THE SPRINT RUNNING ATHLETICS SPORT FOR DISABILITIES AT NPCI PASURUAN

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ABSTRACT

This study aims to analyze the physical condition of disabled athletes in the sprint athletics event under the auspices of the NPCI (National Paralympic Committee Indonesia) Pasuruan Regency. The physical conditions measured include muscle strength (sit-ups and push-ups), endurance (1000-meter run), speed (60-meter run), agility (zig-zag run), and explosive power (vertical jump). This study used a survey method with a descriptive quantitative approach, involving 10 disabled athletes aged 16–30 years. The instrument used was a series of standard physical tests tailored to the characteristics of disabled athletes.The results of the study indicate that most athletes are in the good to excellent category in terms of strength, speed, and endurance. However, in terms of agility, the majority of athletes are still classified as inadequate. These results demonstrate the need for individual and ongoing evaluation of training programs to optimize the performance of athletes with disabilities, especially when facing higher levels of competition. This research is expected to serve as a reference for coaches and organizations in designing more effective and adaptive development programs.

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INTRODUCTION

An athlete's physical condition refers to the level of fitness and physical ability an athlete possesses to perform sports activities at an optimal level. Physical condition encompasses various aspects such as strength, endurance, flexibility, agility, speed, and body composition. Maintaining good physical condition is essential for athletes to achieve peak performance, prevent injury, and enhance recovery after training or competition. An athlete's physical condition is crucial for following athlete training. This shows that physical condition is crucial for developing tactics, strategies, and techniques in sprinting (Arifin, 2014). In addition, technical factors, game strategy (tactics), and mental readiness also play an important role in supporting the improvement of an athlete's performance (Cania et al., 2019). Every athlete must be physically and mentally healthy to perform all tasks without difficulty. Good physical condition is essential for performing various activities optimally. Athletic performance is not dependent on a person's physical condition. The goal of improving an athlete's physical condition is to achieve an ideal level of physical ability that can be used to support sports activities and achieve optimal performance (Purnomo, 2019).

Sprinting is one of the most exciting events in athletics due to its speed and intensity. Major events like the Olympics and the World Championships in Athletics always include sprint events, with much attention paid to the world's fastest runners. Sprint runners must come from athletes who predominantly have white or fast muscles. This is because, in addition to requiring high speed, sprint runners also need requires stride distance, strength, leg muscle strength, stride frequency, technical coordination, flexibility, and aerobic endurance (Nopiyanto et al., 2019). Sprinting is a type of fast running performed over short distances with the goal of

reaching the finish line as quickly as possible. In sprinting, athletes must use maximum strength and speed from start to finish. Sprinting emphasizes rapid acceleration, maximum speed, and endurance. Running can also be used as a means of achieving success. Improving sports performance is based on an athlete's physical, technical, tactical, and strategic abilities in the relevant sport. Physical fitness is the foundation of training, as good physical fitness is crucial to supporting other training factors (Nurhayati, 2018).

Athletes with disabilities play a vital role in the world of sports, proving that passion, determination, and hard work can overcome physical and mental obstacles. Athletes with disabilities are individuals with physical, mental, sensory, or intellectual limitations who consistently participate in competitive sports and achieve success. The Paralympics are nationally and internationally recognized competitions that feature athletes with disabilities. The National Paralympic Committee of Indonesia (NPCI) helps athletes with disabilities in Indonesia maximize their potential. NPCI supports athletes with disabilities such as deaf-mute, physically disabled, mentally retarded, and blind. Twelve sports will be contested at the 16th National Paralympic Week in Papua. These include athletics, boccia, badminton, chess, archery, swimming, weightlifting, judo, soccer, and table tennis (Magfiroh & Jannah, 2022).

METHOD

According to Sugiyono (2021), the quantitative research method is a research approach based on the positivist paradigm. This method is used to study a specific population or sample, with a sampling technique that is generally random. Data collection is carried out using pre-designed research instruments, and the data obtained are then analyzed quantitatively or statistically to test previously formulated hypotheses. In this study, the approach used was a survey method with a quantitative descriptive design, which aims to describe the phenomena or variables being studied based on numerical data collected from respondents.

Quantitative research methods are research approaches that use numerical data to objectively analyze specific phenomena. The goal is to test hypotheses, measure variables, and explore cause-and-effect relationships through statistical approaches. Qualitative approaches rely more on logical reasoning and understanding the interpretation of the research object. In contrast, quantitative approaches utilize statistical and mathematical testing tools, often referred to as quantitative descriptive analysis. Even today, due to the development of these methods, quantitative approaches are completely useless without qualitative analysis (Muhajirin et al., 2024).

RESULT AND DISCUSSIONS (70%)

Research Result

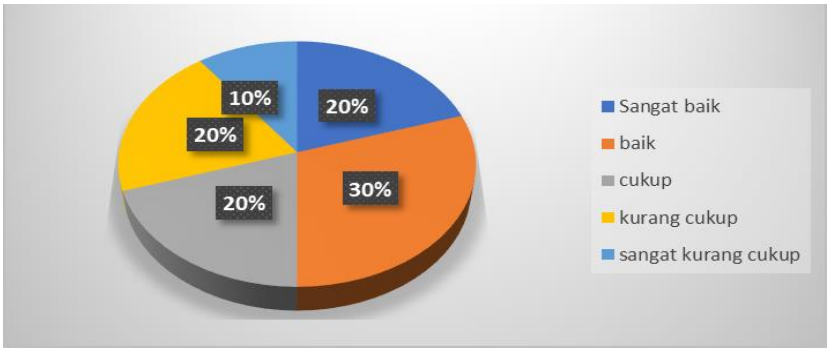
This section is the central part of the article. It is where the author should explain in words what the author discovered in the research. It should be laid out and in a logical sequence. The results of the study presented in this section result from a clean process of data analysis, such as statistical calculations and testing processes or other processes for the achievement of its research. State the findings of the study concisely. If the authors want to display a table, use the following format:

Table 1. *Style* and Function

NO	NAMA	CABOR	KLASIFIKASI	USIA	BB	TB	SIT UP	SKOT JU	60 M	1000M	LARI Z	V JUMP
1	rizal	Atletik	Tuna daksa	19	60	168	15	19	7.23	4.45 menit	13,54 detik	2.58 M
2	hidayat	Atletik	Tuna daksa	30	70	172	22	25	9.56	4.58 menit	15,28 detik	2,85 M
3	jumain	Atletik	Tuna daksa	35	60	155	15	30	10.46	5.16 menit	16,78 detik	2,00 M
4	hamid	Atletik	Tuna daksa	30	65	165	21	33	8.25	4.50 menit	14,54 detik	2,50 M
5	naya	Atletik	Tuna daksa	16	68	158	6	12	11.26	5.25 menit	17,28 detik	1,80 M
6	febri	Atletik	Tuna daksa	21	52	163	5	10	8.58	4.55 menit	15,35 detik	2,55 M
7	rahman	Atletik	Tuna daksa	30	68	170	19	35	8.56	4.57 menit	14,55 detik	2,65 M
8	heru	Atletik	Tuna daksa	23	68	165	10	20	9.45	5.10 menit	14,45 detik	2,50 M
9	Zainul	Atletik	Tuna daksa	22	55	158	23	21	7.34	4.40 menit	10,25 detik	2,00 M
10	aziz	Atletik	Tuna daksa	24	67	170	18	24	6.23	4.20 m3nit	8,20 detik	2,95 M

A. Sit Up Test Results

The sit-up test aims to measure the strength and endurance of the abdominal muscles. The following is a distribution of sit-up test results.

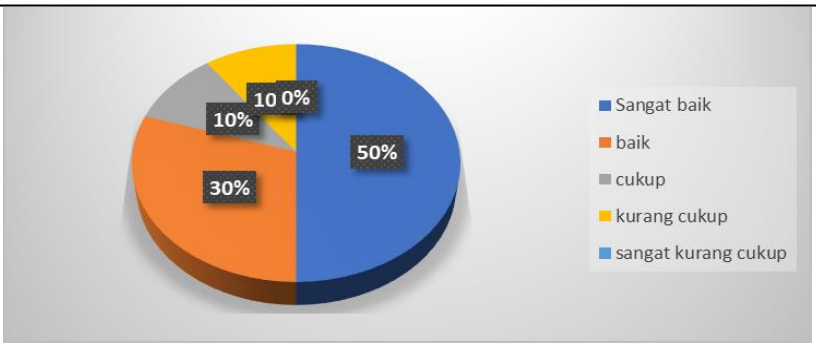


Picture 1. Diagram Of Athletes With Disabilities At NPCI Pasuruan

The test results of the diagram above show that the majority of athletes with disabilities at the Pasuruan NPCI are in the very good category (20%), good (30%), sufficient (20%), insufficient (20%), and very poor (10%), although some athletes have shown sufficient performance. Only a few Athlete, namely 10%, have reached the very poor category.

B. skot jumpTest Results

The Scot jump test aims to measure leg muscle strength and endurance. The following is a distribution of Scot jump test results

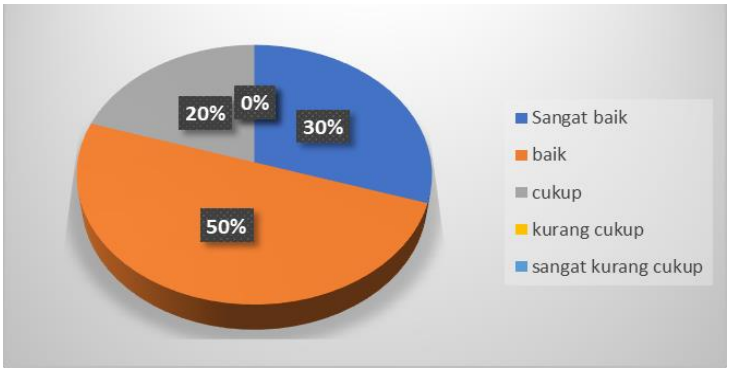


Picture 2. Diagram Of Athletes With Disabilities At NPCI Pasuruan

The test results of the diagram above show that the majority of athletes with disabilities at the Pasuruan NPCI are in the very good category (50%), good (30%), sufficient (10%), insufficient (10%), and very poor (0%), although some athletes have shown sufficient performance. Only a small number of Athlete namely 0%, reached the very poor category

C. 60 M Running Test Results

The 60-meter run test aims to measure leg muscle strength and endurance. The following is a distribution of the 60-meter run test results.

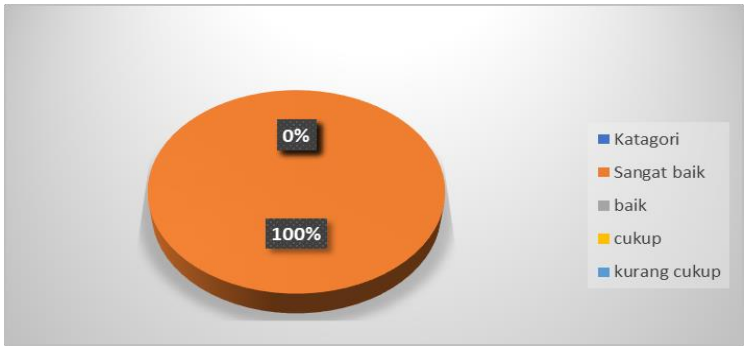


Picture 3. Diagram Of Athletes With Disabilities At NPCI Pasuruan

The test results of the diagram above show that the majority of athletes with disabilities in the Pasuruan NPCI are in the very good category (30%), good (50%), sufficient (20%), insufficient (0%), and very poor (0%), although some athletes have shown sufficient performance. Only a few athletes, namely 50%, have reached the good category.

D. Results of the 1000 M running test

The 1000m run test aims to measure cardiorespiratory strength and endurance, or the ability of the cardiovascular system. The following is a distribution of the results of the 1000m run test.



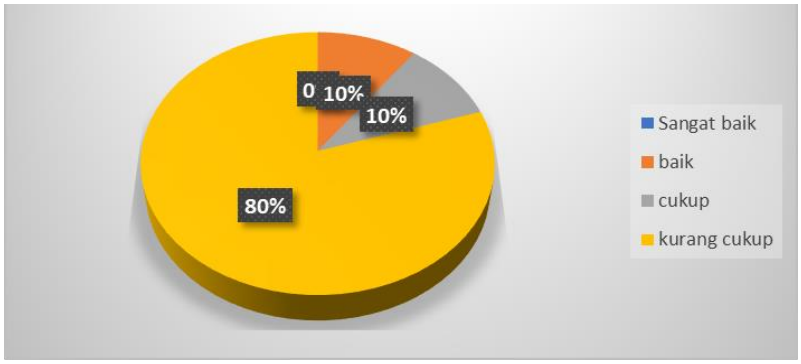
Picture 4. Diagram Of Athletes With Disabilities At NPCI Pasuruan

The test results of the diagram above show that the majority of athletes with disabilities in the Pasuruan NPCI are in the very good category (100%), good (0%), sufficient (0%), insufficient (0%), and very poor (0%),

although some athletes have shown sufficient performance. Only a few athletes, namely 100%, have reached the good category.

E. Zigzag running test results

The zigzag running test aims to assess agility. The following is a distribution of the results of the zigzag running test.

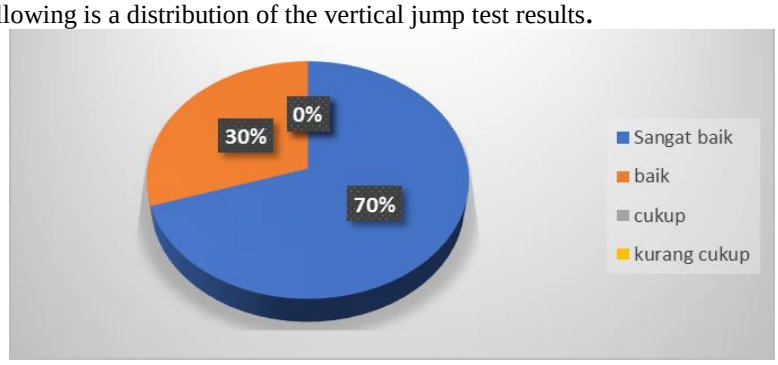


Picture 5. Diagram Of Athletes With Disabilities At NPCI Pasuruan

The test results of the diagram above show that the majority of athletes with disabilities at the Pasuruan NPCI are in the very good category (0%), good (10%), sufficient (10%), and insufficient (8%). Although some athletes have shown sufficient performance, only a few athletes, namely 80%, have reached the insufficient category.

F. Vertical jump test results

The vertical jump test aims to measure the explosive power of the leg muscles and the strength of the leg muscles. The following is a distribution of the vertical jump test results.



Picture 6. Diagram Of Athletes With Disabilities At NPCI Pasuruan

The test results of the diagram above show that the majority of athletes with disabilities in the Pasuruan NPCI are in the very good category (70%), good (30%), sufficient (0%), insufficient (0%), and very poor (0%), although some athletes have shown sufficient performance. Only a few athletes, namely 70%, have reached the very good category.

Based on the recapitulation of scores from all physical fitness test items, including abdominal muscle strength (sit-ups), arm and shoulder strength (scot jump), leg muscle explosive power (vertical jump), speed (60-meter dash), and cardiovascular endurance (1000-meter dash), it is clear that most of the Pasuruan NPCI athletes are in the good and very good categories. And several Pasuruan NPCI athletes are in the adequate or very poor categories overall.

Overall, the results show a variation in physical fitness levels among the athletes. This indicates that although most athletes have achieved optimal fitness levels, some still require improvement in certain areas. Therefore, individual evaluations are necessary to identify factors influencing their performance, including training technique, intensity, and lifestyle. This will allow for a more targeted and specific training program to be designed to improve physical fitness evenly across all NPCI Pasuruan team members, thus supporting future achievements.

CONCLUSSION

Based on the results of the physical condition test analysis which includes abdominal muscle strength (sit up), arm and shoulder strength (scot jump), leg muscle explosive power (vertical jump), speed (60 meter run), and cardiovascular endurance (1000 meter run), it can be concluded that most of the disabled athletes in the sprint athletics branch of NPCI Pasuruan are in the good to very good category in terms of physical fitness. This indicates that the training program that has been implemented is quite effective in developing physical conditions that support sprint performance.

However, some athletes still fall into the moderate to very poor category, particularly in certain components of endurance and muscle strength. This indicates the need for individual evaluation of training programs and the development of more specific physical development programs tailored to each athlete's needs and abilities. Overall, the physical condition of NPCI Pasuruan athletes in the sprinting sport has shown good potential, but efforts to improve and monitor regularly are still needed so that all athletes can achieve optimal fitness standards to support achievements at higher levels of competition.

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