Physical Condition Test Of Trail Running Athletes In Central Sulawesi Province 2023 Prapon Preparation

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Abstract.
Trail running sports are carried out in the mountains or
outdoors which have tracks in the form of paths, in the form of
earthen stones or mixed with sand and small rocks. Indonesia,
especially the Province of Central Sulawesi, has adequate
facilities to develop a type of trail running sport. The purpose of
this study was to find out how good the physical condition of the
trail running athletes in Central Sulawesi Province was in
preparation for the 2023 PrePON. The sample in this study was
15 trail running athletes in Central Sulawesi Province. Data
collection techniques using tests and measurements. The
instruments used in measuring physical conditions in this study
were 1) speed (30m run), 2) strength (leg dynamometer), 3)
strength (push dynamometer), 4) explosive power (vertical
<i>jump), 5) flexibility (sit and reaches), 6) Agility (4x10m shuttle</i>
run) 7) Endurance (1600m run). The results showed that there
were 0 athletes or 0% in the Very Good category, there were 8
athletes or 53.3% in the Good category, there were 7 or 46.7%
in the Moderate category, there were 0 athletes or 0% in the
Poor category and there were 0 athletes or 0% in the Less Once
category. So it can be concluded that the physical condition of
the trail running athletes in Central Sulawesi Province is in the
Good category.

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A. INTRODUCTION

The current development of sports is so good, where many new sports appear that attract the public's interest to try. One of the sports that is growing so rapidly today is trail running. Trail running is a new sport, running competitions must involve running short distances to long distances or extremes on irregular terrain with large positive and negative elevation changes (Kolyfa et al., 2021). Trail running is a popular sport that was recently recognized by the International Association of Athletics Federations (IAAF) as a new running discipline that has developed worldwide over the past few years (Perrotin et al., 2021) (Gajardo-Burgos et al., 2021).

This trail running sport is mostly done in mountain areas or outdoors which has footpaths that have tracks up and down in the outdoors in the form of dirt, small rocks. In Central Sulawesi Province, almost all of its territory is in the mountains which are suitable tracks for trail running. Trail running is a sport that is quite tough because you have to cross quite extreme roads and cover quite long distances. This sport demands high functioning of the nervous system due to the need to make quick decisions in non-standard conditions with almost maximum tension of all major muscle groups (Tezers, 2018).

Therefore this sport requires a very good physical condition. In forming an athlete who excels, an athlete must have gone through the stages of physical training, where physical training is the initial foundation for an athlete to enter a higher stage.(Condolences, 2018). Physical condition is the main factor that needs to be considered before studying techniques, tactics and mentality (Nurhidayah & Satya Graha, 2017). Better physical conditions have many advantages including being able and easy to learn new skills that are relatively difficult, not getting tired easily in participating in training and matches, training programs can be completed without many obstacles, faster recovery time and being able to complete relatively heavy exercises (Bafirman & Sujana Wahyuri, 2019).

The athlete's physical condition plays a very important role in the athlete's training program. The physical condition training program must be well designed and systematic and aimed at increasing physical fitness and the functional abilities of the body systems so as to enable athletes to achieve better performance (Bondarenko, 2015) (Samolenko, 2020) (Andreeva, 2020).

Currently, physical condition is considered as one of the most important health markers and is considered as an integrated measure of the majority (Pelin et al., 2020). Physical condition is the sum of the physical, mental and functional capacities of the human body required to optimally cope with environmental challenges.

The purpose of this research is to find out how well the physical condition of the Trail Running Athletes in Central Sulawesi Province prepares for the 2023 PrePON

B. RESEARCH METHOD

This research is a descriptive research. Namely research that is intended to investigate the circumstances, conditions or other matters that have been mentioned, the results of which are presented in the form of a research report (Arikunto, 2016). Research directed at providing symptoms, facts or events in a systematic and accurate manner, regarding the characteristics of a particular population or area (Hardani et al., 2020). The sample for this study were all trail running athletes in Central Sulawesi Province, totaling 15 athletes. The physical condition instruments used in this study were: Speed (run 30 meters), Strength dynamometer), Strength (leg (push dynamometer), Explosive Power (Vertical Jump), Flexibility (Sit and reach), Agility (shuttle run 4x10 meters), Power Hold (Run 1600 meters)

C. RESULTS AND DISCUSSION

The results of the research on the physical condition of the trail running athletes in Central Sulawesi Province are described as follows:

Speed (run 30 meters)

Speed measurement using a 30 meter run test (Wiriawan, 2017). As for the description of the test results of 15 trail running athletes in Central Sulawesi Province, there are 3 athletes or 20% in the Very Good category, there are 7 athletes or 46.7 in the Good category, there are 5 athletes or 33.3% in the Moderate category, there are 0 athletes or 0% in the Less category and there are 0 athletes or 0% in the Less Once category.

Strength

Dynamometer leg test

Measurement of strength using a leg dynamometer test (Fenanlampir & Muhyi Faruq, 2015). As for the description of the test results of the 15 trail running athletes in Central Sulawesi Province, there is 1 athlete or 6.7% in the Very Good category, there are 8 athletes or 53.3% in the Good category, there are 5 athletes or 33.3% in the Moderate category, there are 1 athlete or 6.7% in the Less category and there are 0 athletes or 0% in the Less Once category.

Dynamometer push test

Strength measurement using a dynamometer push test (Fenanlampir & Muhyi Faruq, 2015). The description of the test results of 15 trail running athletes from Central Sulawesi Province. There are 0 athletes or 0% in the Very Good category, there are 6 athletes or 40% in the Good category, there are 5 athletes or 33.3% in the Less category, there are 4 athletes or 26.7% in the Less category and there are 0 athletes or 0 % in Less Once category.

Explosive Power (Vertical Jump)

Measuring explosive power using a vertical jump test (Wiriawan, 2017). The description of the test results of 15 trail running athletes from Central Sulawesi Province. There is 1 athlete or 6.7% in the Very Good category, there are 6 athletes or 40% in the Good category, there are 6 athletes or 40% in the Moderate category, there are 2 athletes or 13.3% in the Less category and there are 0 athletes or 0% in Less Once category.

Flexibility (Sit and Reach)

Flexibility measurement using sit and reach test (Wiriawan, 2017). There is a description of the test results of 15 trail running athletes from Central Sulawesi Province. There are 0 athletes or 0% in the Very Good category, there are 5 athletes or 33.3% in the Good category, there are 7 athletes or 46.7% in the Moderate category, there are 3 athletes or 20% in the Less category and there are 0 athletes or 0 % in Less Once category.

Agility (shuttle run 4x10 meters)

The agility measurement uses the 4x10 meter shuttle run test (Fenanlampir & Muhyi Faruq, 2015). There is a description of the test results of 15 trail running athletes from Central Sulawesi Province. There are 0 athletes or 0% in the Very Good category, there are 8 athletes or 53.3% in the Good category, there are 7 athletes or 46.7% in the Moderate category, there are 0 athletes or 0% in the Poor category and there are 0 athletes or 0 % in Less Once category.

Endurance (1600 meter run)

Measuring explosive power using a 1600 meter run test (Wiriawan, 2017). The description of the test results of 15 trail running athletes from Central Sulawesi Province. There is 1 athlete or 6.7% in the Very Good category, there are 9 athletes or 60% in the Good category, there are 5 athletes or 33.3 in the Moderate category, there are 0 athletes or 0% in the Poor category and there are 0 athletes or 0% in the Less Once category.

Recapitulation of test results for the overall physical condition of trail running athletes in Central Sulawesi Province

To determine the results of the overall physical condition of an athlete from the total results divided by the number of physical condition tests, the researchers used the physical condition norms as follows: Table 1. Norms of Physical Conditions

No	Norm	Percentage		
1	Very well	4.50 - 5		
2	Good	3.50 - 4.49		
3	Currently	2.50 - 3.49		
4	Not enough	1.50 - 2.49		
5	Less Once	1 - 1.49		
Source: Pesearcher				

Source: Researcher

Based on the norm table above, then the percentage (Anggraini, 2020) The results of the physical condition of the trail running athletes in Central Sulawesi Province can be seen in the following table:

Table 2. Percentage of physical conditioncategories of trail running athletes in CentralSulawesi Province

Norm	Percentage	Number of Frequency	Percent
Very well	4.50 - 5	0	0%
Good	3.50 - 4.49	8	53.3%
Current ly	2.50 - 3.49	7	46.7%
Not enough	1.50 - 2.49	0	0%
Less Once	1 – 1.49	0	0%

The following is a diagram of the percentage results of the overall physical condition of the trail running athletes in Central Sulawesi Province.

Diagram 1. Percentage of overall physical condition results.



Based on table 1 and diagram 1 above, the results of the overall physical condition of the trail running athletes in Central Sulawesi Province of 15 athletes have 0 athletes or 0% in the Very Good category, there are 8 athletes or 53.3% in the Good category, there are 7 athletes or 46.7% in the Moderate category, there are 0 athletes or 0% in the Less category and there are 0 athletes or 0% in the Very Less category.

Activity is an important factor in improving physical development (Samolenko,

2020). Today, physical condition is one of the most important markers of health and is considered an integrated measure of the daily performance of most bodily functions (Pelin et al., 2020). Athletes who do not have excellent physical condition, then achieving peak performance will experience many obstacles and it is impossible to achieve high (Iqroni, 2017). To get high achievements, a person needs to be trained in his physical and psychological abilities (Ronaldo Wijaya, Tono Sugihartono, 2017). Therefore, it is necessary to carry out periodic physical condition tests, especially for trail running athletes in Central Sulawesi Province.

Based on the research data, it can be seen that the physical condition of the trail running athletes in Central Sulawesi Province is in the Good category. Adequate training programs must be provided so that the physical condition of the athletes can improve and tests must be carried out regularly. Physical condition is something that must be maintained by athletes even though they have to practice independently in their respective areas (Purnamasari et al., 2022). Physical training is considered a complete pedagogical system (Napadiy, 2014). In today's modern conditions, the problem of maintaining the health of the younger generation, which reflects a new approach to organizing physical activity and health, is increasingly relevant (Andreeva, 2020).

Research ever conducted by (Bondarenko, 2015)suggested that physical condition determines the effectiveness of training and health improvement. Good physical condition can improve and strengthen the quality of technique. The status of an athlete's physical condition can be known after taking a physical condition test, with training it is hoped that achievement will increase (Metikasari & Roepadjadi, 2020).

D. CONCLUSION

Based on the results of the research and discussion above, it can be concluded that the physical condition of the trail running athletes in Central Sulawesi Province is in the Good category. However, on certain test items such as speed, there were several athletes who got the Very Good category. Therefore, the authors recommend to the management and coaches to create an exercise program that can improve the athlete's physical condition. Although there were several obstacles encountered, one of the obstacles was the spread of athletes from various regions in Central Sulawesi Province.

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