#### Research Article

# Evaluating the athletics Athletes' Physical Fitness for PON XXI/2024 Qualification

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#### Abstract.

Maluku's achievements can grow when the human resources of the coaches are enhanced to promote professionalism in the development of the science and technology of sports. Thus, the training process is not solely based on experience but on the science of training, which is studied in depth to support the better development of training athletes in the future. This study aims to determine how well Maluku athletic athletes' physical fitness is prepared for the PON XXI/2024 qualification round held in Solo, Central Java. This study used saturation sampling to study all the population samples. The instruments utilized in this study are the VO2 Max test, local muscle endurance test, biomotor ability test, speed and power tests, and local muscular stamina tests. The results revealed that the athletes' physical fitness to face a national event, in this case, the PON XXI/2024 qualification, is still considered medium, and the physiological condition belongs to the category of good based on the running time achievement that is close to the time achieved on the PON XXI qualification. The results of the study indicate that Maluku's athletic athletes have improved. However, the improvement has not surpassed the PB PASI time record. Despite the improvement in performance during training, the athletes had not reached the target to pass into the PON XXI Qualification.

**Keywords:** evaluation, physical fitness, athletes' achievement.

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# 1. INTRODUCTION

Athletics is the first sport in the world. Since prehistoric times, movements such as walking, running, catching, jumping, and throwing have been natural activities in life, both hunting and otherwise. In line with that, Bompa [1] argue that athletics is the most basic sport for the other sports. Athletics is often referred to as the master of all sports because it is the oldest sport in the world, and all sports require the elements present in athletics, that is, running, walking, jumping, and throwing.

In Indonesia, athletics began to be introduced during the Dutch colonization. According to Harsono [2], "Athletics are physical activities consisting of basic dynamic and harmonious movements, namely, walking, running, jumping, and throwing." In addition, such sports are very useful for increasing human mobility, such as strength, speed,

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balance, flexibility, and so on. Therefore, it cannot be denied that athletic sports significantly improve physical freshness, ability, speed, and endurance for other sports.

Generally, athletics is divided into four branches-running, jumping, throwing, and walking-and all branches or numbers in athletic sports require good physical fitness skills. This idea is in accordance with the statement mentioned Suryabrata [3], "Athletics is one of the sports that require physical fitness such as power, balance, speed, reaction time, coordination, and agility." Furthermore, physical fitness is a basic ability that every athlete must have to improve their performance and demonstrate the body's ability to function comprehensively.

The aforementioned reason emphasizes physical fitness's essential role in athletics athletes' achievement. According to Rubianto [4] "Physical fitness is the unity of components-components of physical condition that are interrelated." in addition, [5] states, "Physical fitness is an inseparable component of enhancement and maintenance." Therefore, the physical fitness of athletes can be developed and enhanced when the training process is done well and seriously with good training program planning. In other words, proper planning of physical fitness training is required for athletes, including athletics athletes.

Based on the preliminary study, the athletics athletes who are involved in Persatuan Atletik Seluruh Indonesia (literally translated as the Indonesia Athletics Federation) of Maluku Province (hereafter referred to as PASI Maluku) have not conducted a test due to the level of the athletes' physical fitness. The training program given by the coach continues to run without any database of the athletes' physical fitness. On the other hand, the athletics coach of PASI Maluku should record the athletes' physical fitness progress and show the data to the athletes. This data can also be used to plan the next training program. Moreover, athletes with good physical fitness usually find it easier to understand the movement technique the coach will give them. As a result, the researchers decided to conduct this current study entitled "Evaluating the Athletics Athletes' Physical Fitness for PON XXI/2024 Qualification." This study aims to determine each athlete's physical fitness level so that coaches can easily design training programs for athletes.

## 2. METHOD

This study has a descriptive-quantitative design. According to Tudor & Gregory [6], research is an organized investigation, or careful and critical investigation, in finding facts to determine something. Meanwhile, the survey method is used for this research.

The sampling technique utilized in this study is saturation sampling. This technique is used when all members of the population are used [7]. Hence, the sample in this study is all athletics athletes at PASI Maluku. Specifically, there are 16 athletes, 11 men and five women, who consist of nine short-distance running athletes, four medium-distance running athletes, and three athletes for long-distance running. The variable in this study is a single variable, which is evaluating the athletics athletes' physical fitness [8]. Meanwhile, some instruments were used to collect the data, such as the VO2 Max test, local muscle endurance test, biomotor ability test, speed and power tests, and local muscular stamina tests

## 3. FINDING

Based on the research purpose, evaluating athletes' performance is at the heart of this study. The data collected in this study reveals the VO2 Max outcomes of all athletes (100%) in good categories. For Overall Intensity (OI), two athletes (20%) are in the good categories, and six athletes (80%) are medium. Meanwhile, in terms of intensity overall demand (IOD), all athletes (100%) are in the low category. The results of Power Test Analysis. It shows that in terms of OI, there are four athletes (50%) in the good category and the other four athletes (50%) in the medium category. Regarding IOD, all athletes (100%) are in the low category. The results of Speed Test Analysis. In terms of OI, seven athletes (90%) are good, and one athlete (10%) is medium. Meanwhile, all athletes (100%) are in the low category for IOD. Based on all the data, the physical fitness of the athletes who were prepared for the PON XXI/2024 qualification, held in Solo, is still in the medium category (60%). Therefore, the physical fitness training for the athletes should be improved to help them ready for the championship.

### 4. DISCUSSION

As displayed in Table 5.1, the physical fitness of all athletes is at the medium level. It is less than maximum after being confirmed with the training intensity scale as proposed by [9]. Thus, it is recommended that the coaches do their best in planning the training program, and all athletes should take the physical fitness training program seriously.

The athletes' physiological condition (VO2 Max) is at the best level; it is at level 53 after being confirmed with the calculation scale of VO2 Max Prediction proposed by [10]. Thus, the VO2 Max should be kept. Even, it can be improved since the better the VO2 Max condition, the better results will be achieved [11].

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TABLE 1: The Results of Physical Fitness Evaluation of Athletics AthletesPrepared for PON XXI/2004 Qualification in Solo.

NAME	VO2 MAX			BIOMOTOR ABILITY						Running Ability	
	Functional muscle endurance			Power		Speed		local muscle endurance			
	Vo2	OI	IOD	OI	IOD	OI	IOD	OI	IOD	OI	IOD
Crismendo	48	74	22	76	24	83	25	72	22	69	19
Maya	46	79	24	80	25	75	22	76	22	77	24
Selvi	47	76	23	74	23	79	24	79	22	81	26
Yunus	48	80	24	79	24	83	24	73	22	78	24
Adam	47	74	23	74	23	74	22	75	21	74	23
Yanes	42	77	23	76	24	75	22	70	20	75	23
Wempi	45	81	25	73	23	74	24	75	21	75	23
Yopi	49	78	24	82	25	76	22	77	22	77	24

The time record achieved in the running test of each athlete is close to the time record of qualifying standard of PON XXI/2024 Aceh-North Sumatera, which is being made a benchmark in this study and the qualification round for PON XXI/2024 in Solo. Unfortunately, the target being set has not been reached yet, so the athletes and the coaches should focus more on the training process.

Moreover, the results indicate that there is an improvement compared to the special preparation results. It means that this result can be used in establishing the program for the competition preparation, which is referred to the specialization of biomotor ability (physical) that dominates in athletic sports. For example, the training is developed from local muscle endurance to power endurance, speed power and speed endurance.

## 5. CONCLUSION

Based on the results of the evaluation, the physical fitness of the athlete to face a national event or championship, in this case, pre-qualification round for PON XXI/2024 which is held in Solo still belongs to moderate. Yet, the physiological condition is in the category of good. With respect to the time record, it has already been close to the target time set for the qualification round of PON XXI/2024. It means that there is an improvement in the athletes.

Although the results indicate the improvement of Maluku athletics athletes, the achievement has not been able to pass the time record already set by PB PASI. The improvement cannot bring the Maluku athletics athletes to pass into the qualification

round for PON XXI/2024 due to the time record that has not reached the qualifying standart. Therefore, either the athletes or the coaches are advised to still do their best in the training program, especially in the physical fitness training as the priority.

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