

Thirty Meter Running Skill Test Of Rugby Athletes

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Abstract

Running speed is one of the main factors for the achievement of rugby athletes. The test of the sprint running skills of the University of Muhammadiyah Surakarta (UMS) Rugby athletes is the analysis of this study, where the athletes tested are athletes who play as defenders. In this research, the type of research used is quantitative research with ex post facto methods. Collecting research data using valid tests. Then analyzed with categorization and SPSS to determine the average running speed of rugby athletes. The results showed that two athletes were in poor condition, two were in the moderate category, three were in high condition, and three were in excellent condition. Meanwhile, the average running speed of all athletes is in the moderate category. Based on these results, it is necessary to improve the speed quality of rugby athletes, especially defenders, so they can help defend quickly.

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INTRODUCTION

Rugby is a kind of team ball game played by two teams (Runswick et al., 2020). Each team tries to score by kicking, throwing, or carrying the ball to kick the opponent's goal or touch it behind the opponent's line. The team that scores the most points is the winner (Bennett et al., 2019; Colomer et al., 2020; Till et al., 2022). This rugby sport requires physical elements such as speed, agility, strength, and accuracy (Chiwaridzo et al., 2020). In doing so, it needs a good team organization (Bompa & Claro, 2015; Vaz et al., 2021). If these physical elements are not optimized for rugby athletes, there will certainly be no glorious victory in every match because the four elements are interrelated. Speed is an athlete who can run quickly with the ball and block the opponent (Parmley et al., 2023). The agility of an athlete can avoid the opponent when he wants to be caught. The strength of how the athlete maintains the ball so that it is not captured by the opponent or even the power in throwing the ball (Johnston et al., 2019). The accuracy with which a player Athletes are required to throw the ball at a friend or goal to create a score (Mosey & Mitchell, 2020). That is proof that the physical element of rugby needs to be improved (Cunningham et al., 2018; Till et al., 2022).

But speed for rugby players is a dominant indicator that needs to be improved (Twist & Worsfold, 2014). According to Herman, speed is moving and changing places quickly in a match as a response to changes and dynamics in the course of the competition to increase the number of attacks and forms of defense, where speed is an effective enough component to face one on one with an opponent, to close the distance with /off the ball in a defensive position, and attacks with good technical and tactical skills (Aljabar & Purnomo, 2023). The statement emphasizes the importance of speed for rugby players to achieve optimal results. In addition, a good training program also supports achievement (Wiguna, 2021). Before creating an exercise program, the trainer must perform a physical or skill test to determine the initial physical condition (Purnomo, 2019). In this study, researchers will test the running skills of rugby athletes. A test is a tool or procedure used to determine an arrangement in a way or rules that have been determined. To perform this test depends on the instructions given. In sports, assessing a person's skills is done by testing, measuring, and evaluating. In simple terms, a test is a tool used to measure. Measurement is a process, while evaluation means the results obtained (Fenanlampir & Faruq, 2015; Susilawati, 2018; Tenenbaum et al., 2011).

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Speed is an asset for athletes who take part in sports that rely on the physical. Several research studies on speed training programs explain the positive impact on athlete performance (Acar & Eler, 2019; Akhmad et al., 2021; Azmi & Kusnanik, 2018; Bullock et al., 2012; Di Domenico et al., 2019; França et al., 2022; Garg & Kadyan, 2016; Mijatovic et al., 2022). This statement needs to be responded to by coaches in the sport of rugby before determining a speed training program. It is necessary to carry out a running skill test to find out the initial condition of the player's speed. Since 2018-2023 there has been no research that examines the speed of rugby players, especially in Indonesia, so this research gap will discuss how well and the results of athletes' speed training while participating in MBO rugby training at Universitas Muhammadiyah Surakarta.

METHOD

In this research, the type of research used is quantitative research with ex post facto methods. The ex post facto method is research that examines events that have occurred, then looks back to find the factors that led to these events and causal relationships that cannot be manipulated or manipulated (Creswell, 2010). Ex post facto research only reveals a causal relationship between one subject and another, and this relationship cannot be manipulated (Sugiyono, 2017). This study will reveal events where data were obtained from UMS rugby athletes. The data used in this research is secondary data.

The secondary data referred to in this study were obtained from UMS rugby MBO athletes in the form of 30-meter sprint test results. The subjects used in this study were UMS MBO rugby athletes who were still actively practicing, consisting of 10 athletes. The test used is a 30-meter run whose purpose is to measure speed. The tools needed are a flat surface with a minimum distance of 30 meters, a cone border, a stopwatch, and a screening paper. Instructions for conducting the test: (1) The examiner stands at the starting line; (2) The tester gives the signal, the participants quickly start running, and the tester turns on the stopwatch; (3) Test reaches the finish line; and the time on the stopwatch is stopped; (4) Do this test with two repetitions. Sprint test results from data processing are calculated using the SPSS application to determine the data's average, percentage, reliability, and validity. This research was conducted for one month. The 30-meter test norm is presented in table 1 below.

Table 1. The Criteria for the 30-meter Run Test

30-meter run test (second)		
Male	Female	Category
< - 3.91	< - 4.50	Excellent
3.92-4.34	4.52-4.96	High
4.35-4.72	4.97-5.40	Moderate
4.73-5.11	5.41-5.86	Low
> -5.12	> -5.86	Poor

(Source : Harsuki, 2003: 330)

RESULTS AND DISCUSSION

The following are data processing results on the running skills test as outlined in table 2.

Table 2. Observation Data

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SPRINT 1	4.465	.241	.710	.
SPRINT 2	4.301	.286	.710	.

In Table 2, the average score obtained in the first experiment was 4.301 and in the second experiment was 4.450. The median value in experiment one was 4.335, and in experiment two was 4.4450. This means that the average athlete's ability is in the medium category. Meanwhile, based on Table 1, the results obtained were two athletes in the less category, two in the moderate category, 3

in high condition, and 3 in excellent condition, with a total of 10 athletes. Thus, the overall athlete is said to need to add hours of practice to increase speed. Speed is the ability to perform similar movements in succession in the shortest possible time. Speed is the ability to cover a distance in the shortest possible time. Based on this description, running speed can be defined as a record of the time used to make a running movement by covering a certain distance. Because later, the speed training process will affect the athlete's performance ([Fury et al., 2022](#)).

This study aims to test running speed with a 30-meter running skill test ([Brown & Ferrigno, 2014](#)). Based on the analysis results, it is known that the skills test that has been carried out answers that there is a need to increase speed training, which is packaged through a training program. The speed that athletes have must be increased through practice. Increasing running speed is not something easy. Often the coaches are frustrated because the running speed of the athletes is difficult to increase even though programmed training has been carried out. The trainer needs to assess the appropriate training model so that the athlete's speed can increase as expected. In the field, coaches often provide training programs to increase running speed, with forms of training that are unsuitable for speed characteristics. In order to facilitate the employment of a range of exercise techniques to build many components of fitness concurrently throughout childhood and adolescence, exercise models are integrated into practice ([Pichardo et al., 2018](#)). So it is necessary to have variations of speed training so that athletes can vary zigzag running, straight, and acceleration to carry the ball or drive away opponents ([Brown & Ferrigno, 2014](#)). The results of previous research related to speed training have a positive impact on athletes, can present insights for athletes to be even more persistent in speed training, and for coaches not to make speed training programs easy, considering that rugby is a sport that requires speed ([Bompa & Claro, 2015](#)).

The results of this skill test have implications for the importance of speed for Rugby athletes. Seeing the impact of training that so far has not emphasized speed training, it is necessary to emphasize physical training, especially on running speed, to minimize the occurrence of defeats that athletes will face when competing. This study has several limitations, such as the less-than-optimal test implementation. It is recommended to further explore findings in the field through experiments, qualitative methods, or mixed methods that combine quantitative and qualitative approaches in an integrated manner. It is also hoped that it can provide further information about the physical conditions that are still related to the sport of rugby. In addition, the sample of this study is limited and only at one university, which can affect research results that cannot be generated. Therefore, it is highly recommended to increase the population and sample to get a more comprehensive picture so that it can become academic and achievement records.

CONCLUSION

This research aims to get the results of running skills during rugby practice. The results of this study indicate a need for increased training, starting from the athlete himself and supporting the training program provided by the coach to increase speed. The results obtained from the study were two athletes in unfavorable condition, two in the moderate category, 3 in high condition, and 3 in excellent condition. Meanwhile, the average running speed of all athletes is in the moderate category. This result is an important record for the future of coaches and associations.

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AUTHOR CONTRIBUTIONS STATEMENT

The contribution in writing this is the writer JM completing his writing, MIR is collecting research data, while JP is in charge of analyzing data.

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