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REVIEW

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In Junior High School Boys, a Comparison of Hollow Sprint and Acceleration Sprint Methods on the Sprinter 100 Meter

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*Rian Akbari[1abcde], Herli Pardilla[1abcde], Zulfah[1abcde]

[1]*Universitas Pahlawan Tuanku Tambusai, Indonesia.*

A B S T R A C T

The purpose of the study. The purpose of this study was to describe the increase in extracurricular spint abilities of male students at Junior high school. The research method was this study using an experiment with a quasi-experimental type of research and the research pattern used in this study was a nonequivalent control group design.

Materials and methods. This design involves two groups, namely the experimental group and the control group. The subjects of this research were extracurricular students of Junior high school.

Results. . The results of this study can be concluded that the results of the 100 meter sprint ability of male extracurricular students at Junior high school with an average sprint ability of 100 meters 0.933, thus it can be concluded that by using the hollow sprint method on acceleration can improve the ability to sprints.

Conclusions. Based on the results of data analysis, description, testing of research results and discussion, conclusions can be drawn based on the results of calculations that have been carried out, a significant value of 1.080 1.054 is obtained. Thus, the hypothesis states that there is a significant difference between the hollow sprint and accelerating sprint exercises on the 100-meter running speed of male students Junior high school, which is acceptable.

Keywords: *hollow sprint; acceleration sprint; sprint 100 meter.*

A R T I C L E I N F O

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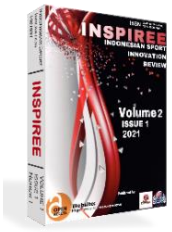

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INTRODUCTION

Sport is a human behavior in the form of activating physically to show skills that are in accordance with the purpose of the activity (Arnab et al., 2014). The purpose of human exercise can be divided into four forms according to the target, namely sports for educational purposes, recreation, physical fitness and achievement levels. Sport is currently a trend or lifestyle for some of the general public, even to the point of becoming a basic need in life (Tomlinson et al., 2005). Sport is a very important need because it cannot be separated from the basic needs in carrying out daily movement activities. Sport itself is basically a series of regular and planned exercise to maintain

*Corresponding Author: Rian Akbari, e-mail: akbaririan3@gmail.com
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and improve the ability to move, and aims to maintain and improve the quality of one's life (Bluemke et al., 2010). This is in line with what is mandated in the Indonesian National Sports System Law Number 3 of 2005 that sports are all systematic activities to encourage, foster, and develop physical, spiritual and social potential (Giriwijoyo, 2007).

Achievement sports are sports that foster and develop sportsmen specifically in a programmed, tiered and sustainable way through competitions that are then carried out, athletes who have the potential to be able to improve their performance will be included in dormitories or special training places so that they can be fostered further in order to get good achievements. Higher level and with the support of more modern sports science and technology (Bøe et al., 2011). The development of sports science and technology is an increase in the quality and quantity of knowledge and technology that aims to utilize proven scientific methods and theories to improve the functions, benefits and applications of existing science and technology or to produce new technology for sporting activities. (Giriwijoyo, 2007). According to Widya (2011) Track and Field is one element of physical education and health, as well as components of overall education that prioritizes physical activity and fostering a healthy life and harmonious, harmonious and balanced physical, mental, social and emotional development. Athletics which consists of walking, running, throwing and jumping is said to be the oldest sport and is also called the mother of all sports and is often called the Mother of sports. The reason is because Track and Field movements have been reflected in early human life, remembering that they unconsciously did walking, running, jumping and throwing in an effort to maintain and develop their lives, even they used them to save themselves from the disturbances of the natural surroundings.

The 100 meter running number is a sprint which can be interpreted as running at full speed for 100 meters and carried out in the shortest possible time. The 100-meter running activity is divided into several stages, namely: starting, running as fast as possible, maintaining speed and reaching the finish line (Khargonekar, 2008). Therefore, it is necessary to master these stages that can support a 100 meter speed. In the implementation of the 100 meter run, the first thing that must be done is the start attitude, so for a fast runner, starting is an initial ability that really must be

mastered. Excess or delay in starting will result in big losses for a runner, therefore the start must be maintained, studied and trained well (Rahim, 2011).

Based on the results of observations and interviews with teachers of Physical Education subjects at Bangkinang city junior high schools which were carried out on June 3 to 5, 2021 in carrying out a 100-meter sprint, the technique carried out by students was not quite right from the beginning to the end of the running movement. To obtain optimal results in the 100-meter sprint, in addition to students having strength, agility, speed, and coordination of movements, they must also master the techniques to perform sprint movements quickly, flexibly and smoothly. At this time what is happening in junior high schools is that teachers only provide basic material to students and do not examine why students' sprint results are not satisfactory while the start of the run is done well.

The problem that arises in students is the technique that is done correctly so that it affects the results of the run. In addition, the lack of speed, agility and teacher understanding of how the method should be given to students is also an inhibiting factor. Based on the results of observations made, there were results that 8 out of 10 students had problems in doing the sprint, 4 people did the wrong prefix so that the results were not satisfactory, 4 people did the technique well but the end result was not as expected. In addition, teacher teaching methods tend to be conventional or monotonous, only based on books without any updates or modifications in teaching, this also causes students' interest to also decrease in this sprint running material so that students' interest or willingness to explore the material is also reduced. The teacher's lack of creativity in providing training to students is the main factor in the results obtained from this sprint, the teacher conveys the facts on the ground showing that teachers use the acceleration spint method a lot. Acceleration sprint is a form of acceleration running exercise where the running speed increases slowly from slow to maximum speed. Accelerated sprinting exercises can be used to develop speed. This form of exercise is very good for developing the anaerobic energy system, because all forms of rapid movement are anaerobic power movements.

However, there are many types of training methods that can be used to increase running speed. In addition to the above training methods, methods that can be used

to increase running speed are the hollow sprints training method. In carrying out the exercise program should be done with the right method. With the right training method, it will give the results as expected by the students. The problem that is still often faced by teachers is how to choose and determine the appropriate training method for their students. The hollow sprint exercise is an exercise method that can be used to improve the performance of the 100 meter sprint. The hollow sprint exercise has different characteristics. So it is likely to have a different effect in improving the performance of the 100 meter sprint. In order to determine which training method is more effective in improving students' 100-meter sprint performance, more in-depth research and study is needed.

MATERIALS AND METHODS

Study participants

The sample of this research is junior high school extracurricular students in Kampar district, Riau province, Indonesia.

Study Organization

This type of research is a quasi-experimental research. Quasi experiment or quasi-experiment is the development of the true experimental design. This quasi-experimental design has a control class but does not fully function to control the external variables that affect the execution of the experiment. Quasi experiment is used because in reality it is difficult to find a control group that is used for research.

Testing Procedur

Research on the use of the 100-meter running exercise method by physical education and sports teachers. In this appraiser divided into four, the first seen from the assessment indicators followed by sub indicators, pictures, and the last one is the assessment. starting from the prefix how the position of the head, body, hands, feet is in accordance with the existing picture then can determine the assessment of the movement. when running, notice the movement of resisting forward strongly, the body still leans forward, the movement of the foot steps for this assessment stage. Next, finish is seen how to drop the chest forward and drop one shoulder forward, and run as fast as possible until a few meters past the finish line.

RESULTS

Based on the results of data analysis, description, testing of research results and discussion, conclusions can be drawn based on the results of the calculations that have been carried out, a significant value of 1,080>1,054 is obtained. Thus, the hypothesis states that there is a significant difference in the effect of hollow sprint and accelerating sprint exercises on the 100-meter running speed in male junior high school students, acceptable.

Normality test

All the variables greater than 0.05, the hypothesis that the sample is based on a population with a normal distribution is accepted. From this information, the data variables in this study can be analyzed using a parametric statistical approach.

Hypothesis test

The magnitude of the contribution of arm muscle strength to the lower service results can be determined by the formula r2 x 100%, so the contribution of arm muscle strength to the lower service results for junior high school extracurricular students is 97.41%, the rest 2.583% is determined by other factors.

DISCUSSION

In this study, researchers wanted to find out how the effects of two forms of exercise are useful for improving students' running results, the first is hollow sprint and acceleration sprint. The hollow sprint exercise method is a sprint consisting of intermittent sprints performed by running as fast as possible and then running slowly (Pomatahu, 2019), while the acceleration sprint is a form of movement that has several movement components, including jogging, sprinting and walking. This research was carried out on junior high school extracurricular students. The discussion of the results of this study provides a further interpretation of the results of the data analysis that have been proposed. Based on the hypothesis testing has resulted in two groups of analysis conclusions, namely There is a significant difference in influence between the main factors of the study. The main factors studied include: a) Types of sprint training methods, b) Differences in the length of the sprint method of training (Arumugam et al., 2019). There is a significant interaction between the main factors in the form of a two-factor interaction.

CONCLUSION

Based on the results of data analysis, description, testing of research results and discussion, conclusions can be drawn based on the results of the calculations that have been carried out, a significant value of 1,080>1,054 is obtained. Thus, the hypothesis states that there is a significant difference in the effect of hollow sprint and accelerating sprint exercises on the 100-meter running speed of male junior high school students, acceptable. The results of this study indicate that there is a significant difference in the effect of hollow sprint and accelerating sprint exercises on the 100-meter running speed in male junior high school students.

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APPENDIX

Information About The Authors:

Rian Akbari, S.Pd
Email: akbaririan3@gmail.com; Program Studi Pendidikan Jasmani, Keseheatan dan Rekreasi Universitas Pahlawan Tuanku Tambusai, Riau, Indonesia; Address: Tuanku Tambusai Street, No. 23 Bangkinang City, Kampar Districts, Riau Province, Indonesia, 28412.

Dr. Herli Pardilla, M.Pd:
Email: herlipardilla@gmail.com: https://orcid.org/0000-0001-6777-3479; https://www.scopus.com/authid/detail.uri?authorId=57214080181; Department of Physical Education, faculty of Education at Universitas Pahlawan, Indonesia, Tuanku Tambsuai Street, 23, Bangkinang City, 28412, Indonesia.

Zulfah, M.Pd
Email zulfahasni670@gmail.com; zulfahasni@universitaspahlawan.ac.id; https://www.scopus.com/authid/detail.uri?authorId=57203357338; Program Studi Pendidikan Matematika, Universitas Pahlawan Tuanku Tambusai, Riau, Indonesia; Address: Tuanku Tambusai Street, No. 23 Bangkinang City, Kampar Districts, Riau Province, Indonesia, 28412.