



REVIEW

OPEN ACCESS

The Influence of Interval Training Method on The 60 Meters Running in Primary School Students

 <https://doi.org/10.53905/inspiree.v4i03.121>

*Tri Alfian Setiawan^{1abcde}, Vigi Indah Permatasari^{1abcde}, Dedi Ahmadi^{1abcde}

¹Universitas Pahlawan Tuanku Tambusai, Indonesia.

ABSTRACT

The purpose of the study. This research is motivated by the results of the 60 meter run conducted by the fifth grade students of primary school negeri 009 Simpang Kubu, Kampar Regency, which is not optimal and not appropriate in its implementation.

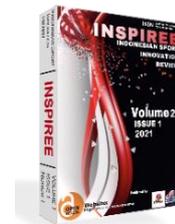
Materials and methods. Research Methods This research uses a pre-experimental method with One Group, namely Pre-test and Post-test Design. The data collection technique was simple random sampling with inclusion and exclusion criteria. Data analysis in this study used the Wilcoxon test, Paired Sample T-test.

Results. Data analysis in this study used the Wilcoxon test, Paired Sample T-test. The results of the study based on the statistical output of "Test Statistics", it is known that Asymp.Sig (2-tailed) is worth 0.000. Because the value of 0.000 is less than 0.05. It can be concluded that "there is a significant difference between pre-test scores and post-test scores.

Conclusions. The conclusion in this study is that there is a significant effect between this interval exercise and the results of a 60 meters run on fifth grade students of primary school negeri 009, Kampar Regency.

Keywords: *Interval training; speed and running 60 meters.*

ARTICLE INFO



Article History:

Received: July 07, 2023

Accepted: September 27, 2023

Published: September 27, 2023

INTRODUCTION

Physical education is a learning process through physical activity designed to improve physical fitness, develop motor skills, knowledge and healthy and active living behavior, sportsmanship, and emotional intelligence. The importance of national sports development is stated in Law No. 3 of 2005 concerning the National Sports System (2016) explains that: The national sports system is a whole sports subsystem that is interrelated in a planned, integrated and sustainable manner to achieve national sports goals. The subsystems in question include, among other things, sports behavior, sports organizations, sports funds, sports infrastructure and facilities, community

* Corresponding Author Tri Alfian Setiawan, e-mail: trialfiansetiawan14@gmail.com

^{abcde}Authors'Contribution: a-Study design; b-Data collection; c-Statistical analysis; d-Manuscript preparation; e-Funds collection.



participation, and sports support including science, technology, information and the sports industry.

Considering the importance of sports, sports education is needed in schools. This has begun to be implemented and is aimed at elementary school to high school students, the aim is to foster physical and spiritual activities for everyone in the context of building the nation. Sports activities are also a form of education. Physical education is a series of physical activities, playing and exercising, to develop healthy and strong students so that they can produce high academic achievements. Especially for Physical Education subjects which include all sports activities, schools can carry out achievement-oriented learning and coaching. One of the sports that usually has sufficient facilities and infrastructure in schools is athletics, because the branches in athletics are movements that people usually do every day. Athletic learning in schools has a dominant role in teaching basic athletic movements Bernhard (2012).

As explained previously, sport is physical activity in games or competitions. There are various types of sports games or competitions in this part of the world, but the author focuses on athletic sports, namely the 60 meter run. Running is the physical activity of carrying out forward steps at speed, while speed is the ability of a person to perform many similar movements with their feet in a short time. Thus running speed is a person's ability to move the body with forward movement to reach a certain distance in a short time. In order to obtain good physical condition, an athlete must carry out regular exercise, one of the exercises that can increase endurance and stamina is interval training. "Interval training is a training system that is punctuated by intervals in the form of rest periods, this training is important to include in the overall training program, apart from that, interval training is also one of the exercises that has a positive impact on the development of endurance and stamina Harsono (2015). Apart from that Rushall and Pyke (2011) explain that "interval training is a form of training that involves activity and recovery. The advantage of this training is that exposure to training is intensive and does not result in excessive fatigue. Based on what has been explained above, the appropriate training model to improve the results of the 60 meter run is to apply a training model in the form of interval training. Because there are many training



methods available, this article discusses one suitable training method, namely the interval training method. Interval training is exercise alternated with rest. Interval training is an important way of training to be included in an overall training program. Interval training is highly recommended by well-known coaches because the results are very positive for the development of athletes' endurance and stamina. The forms of exercise in interval training can include fast running, jogging and leisurely walking.

Based on observations made by the author on Class V students at primary school that the 60 meter sprint sports development continues to be encouraged and the results are not yet satisfactory. Students' lack of motivation in participating in the 60 meter short distance running sport, so that the 60 meter short distance running achievements of class V students are also different. Based on this background description, the researcher intends to raise a title related to speed training on the results of the 60 meters run. It can be seen from the results of the 60 meter run that the students did not achieve optimal results. For this reason, it is necessary to carry out research on The influence of the interval training method on the results of the 60 meter run in at primary school.

MATERIALS AND METHODS

Study participants

The population in this study was all 18 class V students of primary school Negeri 009 Simpang Kubu, Kampar District, Kampar Regency.

Study Organization

Research Method: This study used a pre-experimental method with One Group, namely Pre-test and Post-test Design. Data collection technique is simple random sampling with inclusion and exclusion criteria. Data analysis in this research uses the Wilcoxon test, Paired Sample T-test.

Test and measurement procedures

In the study, running ability was measured, so the instrument used for the initial measurement (pretest) and final measurement (posttest) was a 60 meter run. The 60 meter running test is a sports skill test instrument that already exists and is stated to



be standard for determining a person's ability in athletics, especially sprinting Nurhasan (2001). Each student was taken to run 60 meters on a real running track.

RESULTS

Research results based on the statistical output "Test Statistics", it is known that Asymp.Sig (2-tailed) has a value of 0.000. Because the value of 0.000 is smaller than <0.05 . It can be concluded that "there is a significant difference between the pre-test and post-test scores test score". The conclusion in this research is that there is a significant influence between interval training and the results of the 60 meter run for class V students at primary school.

Normality test

The pretest and posttest normality test shows that the pretest results have a significance value of 0.50, which means it is greater than alpha 0.05, so the pretest value is normally distributed. The posttest significance value is 0.91, which means it is greater than the alpha value of 0.05, so the posttest value is normally distributed. Regarding the results of the Kolmogorov-Smirnov pretest normality test for the 60 meter run, data was found with N or a sample size of 18 students. Getting the mean or average value of 10.772, the standard deviation or standard deviation value is 1.8065, the Kolmogorov Smirnov test value is .248, the asymp.sig (2-tailed) value is .050, it can be seen that the 2-tailed asymp value is 0.050 greater rather than an alpha value of 0.05, the pretest score is normally distributed. Meanwhile, the results of the Kolmogorov-Smirnov posttest normality test for the 60 meter run showed data with N or a sample size of 18 students. Obtaining a mean or average value of 7.763, the standard deviation value is .8820, the Kolmogorov-Smirnov test value is .184, the asymp.sig (2-tailed) value is 0.091, you can see the asymp.sig (2-tailed) value is 0.09 greater than the alpha value of 0.05. Therefore, the posttest scores are normally distributed. Since the data is normally distributed, the comparative test used is the parametric paired t-test

Homogeneity test

Regarding the homogeneity test results of pretest scores with posttest scores, it can be seen that Levene statistics has a value of 0.637, df1 has a value of 2, df2 has a value of 14 and sig has a value of 0.544.



Significance testing rules:

If the p value is > 0.05 then the data is said to be homogeneous.

If the p value < 0.05 then the data is said to be inhomogeneous.

There is a significant difference between the pretest score and the posttest score. The sig value in the homogeneous test results is 0.544 greater than 0.05, so the pretest value and posttest value have the same variance (homogeneous).

Hypothesis test

Based on hypothesis testing, the correlation value between these two variables is classified as strong and positive, where the correlation value is 0.947. Based on the paired test, it is known that the significance value is $0.000 < 0.05$, which means there is a significant difference between the pretest score and the posttest score. As in the descriptive statistics table, it is known that the average time for students to run during the posttest is less time than during the pretest. This means that there is a significant influence between the interval training method and the results of the 60 meter run in primary school students.

DISCUSSION & CONCLUSION

Athletics, especially fast running or sprint events, need to be trained continuously and regularly. So that you get maximum and good results as expected. In this research, training was carried out with the aim of improving the results of the 60 meter sprint for class V students at Primary School Students using the interval training method. Students are trained to carry out a training program in the form of exercises punctuated by intervals in the form of rest periods. For example, running - resting - running - resting - running again and so on, so that it provides benefits for those who do it. The benefit of the interval training method in this research is to find out the extent of the 60 meter running achievement, so that students can be encouraged to improve their abilities. This research started from taking pretest scores which was carried out on Tuesday 24 May 2022 with a total sample of 18 students consisting of 14 men and 4 women. The process of taking pretest and posttest scores was carried out in 2 runs and the fastest run score was taken as final score. The increase in performance in the 60 meter sprint actually used the interval training method. Primary School Students who were given the interval training method for 16 meetings experienced an increase in



their 60 meter sprint results after treatment. According to Tjalick Sugiardo (1991), the process of training 16 times can be said to be training, because you will see a steady increase. After conducting research, it turns out that there are several factors that support the increase in 60 meter sprint performance in Primary School Students, including a track that supports training even on the grass field, making students comfortable and minimizing the risk of injury. However, all student activities are monitored by the teacher when doing exercises or running 60 meters.

A good interval training method program has a positive impact on speed and agility in running the 60 meters. By having greater speed and agility, it will be more advantageous when running. Some experts have expressed opinions about sprinting. According to Warsidi (2013), short distance running (sprint) is defined as all race participants running at full speed throughout the distance they have to travel. Muscle contractions in each part of the body take effect from the start until crossing the finish line. According to Suhaedi (2016), he explained that the 60 meter running number taught in elementary schools was the result of development and modification of this running number.

REFERENCES

- Arikunto. 2016. *Prosedur Penelitian Suatu Pendekatan Praktek*. Jakarta. Rineka cipta.
- Bernhard (2012), *Atletik:Prinsip Dasar Latihan Loncat Tinggi, Jauh. Jangkit don Loncat Galah*, Semarang, Dahara Prize.
- Djamarah dan Zain. 2016. *Strategi Belajar Mengajar*. Jakarta. Rineka Cipta.
- Doddy, Masyithoh, & Setiawati, L. (2018). *Analisis overreaction pada harga saham perusahaan manufaktur di bursa efek indonesia*. *Jurnal Manajemen*, 9(1), 31. <https://doi.org/10.29264/jmmn.v9i1.2473>
- Han, & goleman, daniel; boyatzis, Richard; Mckee, A. (2019). *Instrumen Penilaian Tes*. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699
- Harsono. (2015). *Coaching dan Aspek-aspek Psikologis dalam Coachinng*. Jakarta : Tambak Kusuma.
- Husdarta. 2019. *Manajemen Pendidikan Jasmani*. Alfa Beta. Bandung.



- Sumarya, 2015. *Pendidikan Jasmani untuk Sekolah dasar Kelas V*. Jakarta: Arya Duta.
- Nurhasan. 2001. *Tes Dan Pengukuran Dalam Pendidikan Jasmani*. Jakarta. Depdiknas
- Riduwan. 2015. *Belajar Mudah Penelitian untuk Guru-Karyawan dan Peneliti Pemula*. Bandung Alfabeta.
- Roestiyah, 2011. *Strategi Belajar Mengajar*. Jakarta. Rineka Cipta
- Rushal & Pyke. 2011. *Training for Sport and Fitness*. Australia: The Macmillan Company of Australia PTY LTD.
- Sugiyono. 2015. *Metode Penelitian Administrasi*. Bandung. Alfabeta.
- Syafruddin. 2011. *Pengantar Ilmu Melatih*. Padang. UNP.
- Tamat, Tisnowati dan Mirman, Moekarto, 2012. *Pendidikan Jasmani dan Kesehatan*. Jakarta: UT
- Tim Abdi Guru. 2007. *Pendidikan Jasmani, Olahraga dan Kesehatan*. Semarang. Erlangga.
- Wahjoedi. 2001. *Landasan Evaluasi Pendidikan Jasmani*. Jakarta: PT Raja Grafindo Persada.



APPENDIX

Information About The Authors:

Tri Alfian Setiawan, S.Pd:

Student of of Universitas Pahlawan Tuanku Tambusai; Jl. Tuanku Tambusai No.23, Bangkinang, Kec. Bangkinang, Kabupaten Kampar, Riau, Indonesia, 28412.

Vigi Indah Permatasari, M.Pd:

Lecturer of Universitas Pahlawan Tuanku Tambusai; Jl. Tuanku Tambusai No.23, Bangkinang, Kec. Bangkinang, Kabupaten Kampar, Riau, Indonesia, 28412.

Dedi Ahmadi, M.Pd:

Lecturer of Universitas Pahlawan Tuanku Tambusai; Jl. Tuanku Tambusai No.23, Bangkinang, Kec. Bangkinang, Kabupaten Kampar, Riau, Indonesia, 28412.

