



## The Influence Of The Implementation Of Fish Net Games On Sprint Running Learning Ability

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### Abstract

This study aims to determine the effect of the fish net game on the sprint running learning ability of 35 fifth-grade students at SDN Sekarwangi. The method in this study uses a quantitative pre-experimental one-group pretest and posttest method. Based on the results of the normality test, it is known that the overall pretest data is 0.179 and the posttest is  $0.050 > 0.05$ , which are normally distributed. Then, in the next test using the homogeneity test, it was found that the significance value (Sig) Based on Mean was  $0.987 > 0.05$ , so it can be concluded that the variance of the experimental group data is the same or homogeneous. Then, it was tested using the paired sample T test, and it was found that the Sig. value showed a result of  $0.021 < 0.05$ , which means that  $H_1$  is accepted and  $H_0$  is rejected. Then, in the regression analysis, an R-Square value of 0.386 was obtained. This indicates that 38.6% of the variability in the dependent variable (post-test) can be explained by the independent variable (pre-test), while the remaining 61.4% is influenced by other factors or contributions from other variables. Conclusion, that the results of sprint running learning can be influenced by the fishnet game.



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## INTRODUCTION

The process of teaching basic sprint running in elementary schools still largely uses conventional teaching techniques. Where during the learning process it is still teacher-centered, students are not given the freedom to explore and express their movements, and the teacher only provides repetition of the actual material (Budi et al., 2021). In the sprint running lesson here, students are only instructed to perform sprint running according to the actual lesson. However, this has caused problems during the learning process. Physical education learning in elementary schools aims to help students improve their motor skills. In addition, to foster a sense of enjoyment and willingness to participate in improving motor skills, cognitive understanding, and a positive attitude towards physical activities. In one class during the process of teaching basic sprint running, the learning was seen to be less interesting and enjoyable, causing students to easily become tired and bored during the learning process, which in turn decreased their motivation to participate, resulting in suboptimal learning outcomes and ineffective teaching (Hanafiah et al., 2021). Physical education learning in elementary schools aims to help students improve their motor skills (Anggraeni & Sutiyarsih, 2018).

In the learning process, the teacher's precision in choosing teaching methods greatly influences the continuity of the learning process. Sprint running,

often referred to as fast running, is a method to cover the entire distance as maximally as possible and is done at full speed (Indra & Lumintuarso, 2014). The issue underlying this research is the impact that often arises during the sprint running learning process using conventional teaching methods for elementary school students, which includes (a) students appearing easily bored, (b) students appearing easily fatigued, (c) students lacking interest in participating in the learning, and (d) many students performing the basic sprint running movements poorly. Physical Education is an integral part of education through physical activities aimed at enhancing individuals organically, neuromuscularly, intellectually, and emotionally (Lengkana & Sofa, 2017). Therefore, teachers must be more creative in packaging the lessons to make them enjoyable, by incorporating the traditional fish net game into the basic sprint running movement lessons, because the traditional fish net game has the same characteristic, which is running. In the traditional game of jala ikan, students are required to run as fast as possible. With that, students will unconsciously feel that they are playing, but within the game, there is an element of learning the basic movement of sprinting.

Playing while learning can be used as a strategy in conducting education so that the learning process can run smoothly and the learning objectives can

be achieved. One form of play that can be implemented is by teaching traditional Indonesian games to children (Syamsurrijal, 2020). Thus, the researcher is interested in comparing the traditional fish net game with the ability to learn sprinting. Because in the traditional game of Jala Ikan, it has the same characteristics as sprint running training, which is running. The traditional game Jala Ikan is a game played in groups. The number of children playing it is at least 10 people. For the playing field, the area is generally limited according to the agreement of the children. The more children participate in the game, the larger the playing field needed.

In this game, there are two main roles or two groups; there are players or groups that act as the net and those that act as the fish. The netters will try to catch the fish by forming a circle or net with their hands, while the players who are the fish will try to avoid being caught by the netters. The traditional fish net game can indirectly train the physical condition needed to improve running speed, making students less likely to get bored or tired during the learning process. This increases students' motivation to participate in learning, ensuring that the teaching material is effectively conveyed. The fish netting game also trains children's motor skills, because in this game, children can move freely and run. In addition, this game also trains social intelligence, as it allows children to interact with their peers. Children who play the role of the net will discuss how

to catch or increase the number of nets by targeting the fish they will catch (Widiyanti et al., 2023).

Often, children in the classroom enjoy running, walking around, and jumping. Many do not realize that in those activities, gross motor skills play a more significant role compared to simple moving activities. Through this traditional fish net game, it can train the physical condition needed to improve sprinting ability. The physical abilities of children can be improved through games that are engaging for them (Yosinta et al., 2016). As one example, it can be observed in children who run in a chase during the traditional fish net game to catch their friends. At first, they were not skilled at running, but by playing tag, the children became interested in doing it and became more skilled. Playing while learning can be used as a strategy in conducting lessons so that the learning process runs smoothly and the learning objectives are achieved. It would be even better if the lessons delivered are combined with traditional games, one of which is the fish net game, so that students feel like they are playing.

Traditional games have enjoyable elements that can enhance students' motivation in carrying out the learning process at school (Burstiando, 2015). In schools, traditional games can be integrated with physical education learning, because it is known that physical education is an educational process that provides experiences during the learning process to students in the form of physical activities, play, and

sports that have been planned regularly, aiming to stimulate physical growth and development, motor skills, cognitive skills, emotional, social, and moral development. The Fish Net Game is one of the traditional games that has developed in various regions of Indonesia. This game reflects strong social interactions among children, as well as containing various aspects of physical, social, and cognitive development. This game is usually played by children outdoors and involves cooperation and social interaction among the players. According to (Nurwahidah et al., 2021), the Jala Ikan game helps children develop gross motor skills, such as running, jumping, and dodging. The physical movements involved in this game help improve children's agility, balance, and body coordination.

Based on the above issues, gross motor skills are very important for elementary school children. Therefore, the researcher wants to compare the traditional fish net game with sprint running learning to train the movement technique and physical condition needed to improve the ability and speed of sprint running movements. The researcher wants to delve deeper into how the traditional fish net game can gradually train children's gross motor skills, especially in sprint running learning.

## **METHODS**

This research uses a quantitative approach, which is based on the philosophy of positivism, aimed at

studying a specific population or sample, data collection using research instruments, data analysis of a quantitative/statistical nature, with the goal of testing hypotheses. Based on its characteristics, this research falls into the category of experimental research, which examines cause-and-effect relationships. "The results of the treatment on the independent variable can be seen in the dependent variable" (Rusli, 2021). In the sense that manipulation is carried out on one independent variable, namely the application of the traditional fish net game, to then observe the changes that occur in the dependent variable, namely the learning of sprint running. Because the sample taken is the entire population, the treatment is given to all fifth-grade students of SDN Sekarwangi, Soreang district, totaling 30 people. The research that will be conducted adopts a Pre-experiment using a one-group pre-test and post-test design with tests, and the assessment uses a scoring rubric with the evaluated aspects being the start technique, running technique, and finishing line technique. Data collection in a research study is assisted using research instruments. Research instruments are data collection instruments or tools selected and used by researchers during data collection to make the research more structured and easier with the help of the instrument (Fitriarosah, 2016). The research instrument used in this study is the initial treatment (pre-test) by conducting a 60 m running test, followed by treatment with a fishing net game, and the next test is the

final test (post-test) by conducting a 60 m running test.

### **Participants**

This research involves 30 fifth-grade students from SDN Sekarwangi, Soreang District, Bandung Regency, as the main participants. The number of students involved in this research is 30 people with an age range of 10 to 12 years. In addition, this research was also conducted by Syamsul Jabbar Alamsyah, a student at the Universitas Pendidikan Indonesia (UPI) Sumedang Campus, who served as the principal researcher. Student participation in this research aims to examine the influence of implementing fish net games on the basic movement ability of sprinting. By involving students in that age group, this research can provide a clearer picture of the effectiveness of the teaching methods applied in physical education at elementary schools.

### **Sampling Procedures**

The first step in this procedure is to identify the population that aligns with the research objectives, namely fifth-grade students who are participating in basic sprint running movement learning. Next, the entire sample was given a pre-test in the form of a 60-meter run to measure their initial ability in sprinting. After the pre-test, treatment was given in the form of a fish net game, conducted in several learning sessions to train the students' gross motor skills. After the treatment was completed, the students

took a post-test in the form of a 60-meter run to measure the changes in their abilities after receiving the treatment.

The results of the pre-test and post-test were then analyzed to determine whether the fish net game had an impact on improving the students' sprinting ability. The assessment was conducted based on a scoring rubric, with the observed aspects including starting technique, running technique, and finishing line technique. With this procedure, the research can ensure that the results obtained are valid and reliable in depicting the influence of the fish net game on students' sprinting ability.

### **Materials and Apparatus**

The data collection tool of a research study is assisted using research instruments. Research instruments are data collection instruments or tools selected and used by researchers during data collection to make the research more structured and easier with the help of the instrument (Fitriarosah, 2016). The research instrument used in this study is an assessment rubric with 3 aspects that must be achieved, namely 1) starting technique, 2) running technique, 3) finishing line technique. These aspects are rated from 1 to 4. The instrument was used as an assessment sheet for the initial treatment (pre-test) by conducting a 60 m running test, followed by treatment with a fishing net game, and the next test was the final test (post-test) by conducting a 60 m running test with the same instrument.

## Procedures

In this study, the research procedure consists of several stages, the first being the preparation stage where the research instruments are developed and then consulted with experts. The instruments are then tested to determine their suitability. After this, permission is obtained to conduct the research at the relevant school, and coordination is made with the physical education teacher to determine the research schedule. The second stage is the implementation stage, which begins with conducting a pre-test through a 60-meter sprint test using an assessment rubric, followed by the treatment over 16 sessions, and finally, the post-test. The third stage is the data processing stage, where this stage is carried out after all data has been collected for processing and analysis.

## Design or Data Analysis

The research to be conducted will take a pre-experimental approach using a one-group pre-test and post-test design. The data analysis conducted is a test carried out to collect the observation format that has been conducted using statistical tests on pretest scores, posttest scores, and gain index. The results of the statistical test on the posttest indicate whether or not there is an improvement after the treatment has been applied. To determine the quality of the improvement, it can be seen in the gain index. The data processing steps begin with a normality test to determine whether the obtained data is normal or not. if both data are normal, then proceed

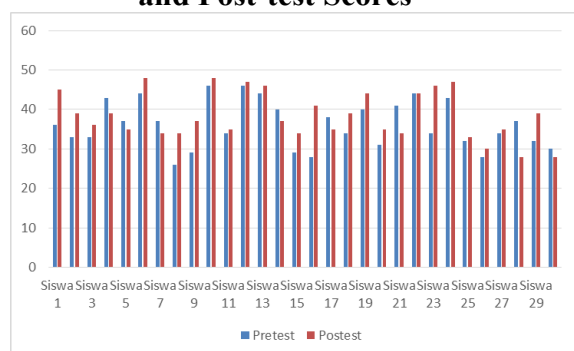
with the paired samples t-test hypothesis test and the r-square test.

## RESULT

The results of this study will be presented in the form of descriptive tables. After that, the collected data is then analyzed. The data analyzed includes pre-test and post-test data from the 60-meter sprint results in the sprint running lessons for fifth-grade students at Sekarwangi Elementary School, to determine whether there is an effect of the fish net game on the ability to learn the 60-meter sprint. The data presented in this table are the results of the normality test, homogeneity test, paired samples test hypothesis test, and r-square test calculations.

## Tables & Figures

**Diagram 1. Comparison of Pre-test and Post-test Scores**



Here is a bar chart showing the comparison of pre-test and post-test scores for each student. Each student has two bars representing the pre-test results (blue) and post-test results (red). From this diagram, we can see the change in scores after the intervention.

**Table 1. Test of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.139	30	.143	.951	30	.179
Posttest	.150	30	.084	.930	30	.050

Based on Table 1, it is known that the results of the normality test obtained a significance value of 0.179 for the Pretest data and 0.050 for the Posttest data. Both values exceed the significance level ( $\alpha = 0.05$ ), meaning  $H_0$  is accepted (both data are normal).

**Table.2 Paired Samples Test**

	Paired Differences							Sig. (2-tailed)
	M	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	
				Lower	Upper			
				er	r			
Pretest - Posttest	2.300	5.147	.940	4.222	-.378	2.42	29	.021

Based on Table 2, it can be seen that the Sig. (2-tailed) value shows a result of  $0.021 < 0.05$ , which means that  $H_1$  is accepted and  $H_0$  is rejected. In this case, it can be concluded that a significance value (p-value) of 0.021 was obtained. Because this value is smaller than the significance level  $\alpha = 0.05$ , it can be concluded that there is a significant

difference between the pre-test and post-test results. In other words, there is a significant effect of the treatment given on the post-test results.

**Table.3 R Square Test**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.622 <sup>a</sup>	.386	.364	4.697

Based on Table 3, it can be seen that an R-Square value of 0.386 was obtained. This indicates that 38.6% of the variability in the dependent variable (post-test) can be explained by the independent variable (pre-test), while the remaining 61.4% is influenced by contributing factors from other variables.

## DISCUSSION

Playing while learning is one of the effective learning strategies to enhance student engagement and achieve learning objectives more optimally. According to the constructivist theory developed by Piaget (1952), children learn through active interaction with their surrounding environment, including through play. One form of play that can be applied in learning is traditional games, such as the fish net game. Syamsurrijal (2020) states that traditional Indonesian games can be used as an interesting and effective learning medium for children.

In the context of physical education, the fish net game can be linked to motor learning theory, which states that motor skills develop through practice

and experience (Schmidt & Lee, 2011). According to Nurwahidah et al. (2021), the fish net game helps children develop gross motor skills, such as running, jumping, and dodging. This is in line with Hasanah's (2016) opinion, which states that games also play a role in enhancing individuals' social skills. Because the fish net game involves running activities that align with the basic movements of sprinting, this game is considered to have the potential to improve children's sprinting skills.

This study aims to analyze the effect of fish net games on sprint running learning ability. Previous research conducted by Widiyanti et al. (2023) shows that the application of the fish net game in learning can improve agility, balance, and the development of leg muscles that support children's gross motor skills. Based on the skill acquisition theory, the development of motor skills requires varied and contextual practice (Magill & Anderson, 2017), so the fish net game can be an appropriate method to improve sprint running skills. Thus, this research aims to delve deeper into how the fish net game can significantly contribute to the learning of sprint running.

## CONCLUSION

Based on the results of this study, the data from the pretest and posttest show normal results and indicate an improvement from the pretest results before treatment and after treatment. Thus, the results of the 60-meter sprint test on fifth-grade students at SDN

Sekarwangi from the data analysis show that the sprint learning ability has improved. With that, this research can be concluded that the application of the fish net game has an impact on the sprint running learning ability, which in turn affects the sprint running learning outcomes.

## REFERENCES

- Anggraeni, D., & Sutiyarsih, S. (2018). *Peningkatan hasil belajar gerak dasar melempar melalui pendekatan bermain Improved results of learning basic motion throw through a play approach*. 14(1), 11–17.
- Budi, D. R., Soedirman, U. J., Listiandi, A. D., & Soedirman, U. J. (2021). *Model Pembelajaran dalam Pendidikan Jasmani Model Pembelajaran Dalam Pendidikan Jasmani Abstrak*. January. <https://doi.org/10.31219/osf.io/xzh3g>
- Hanafiah, M. A., Martiani, M., & Dewi, C. (2021). Pengaruh Model Pembelajaran Numbered Head Together (NHT) terhadap Motivasi Belajar pada Permainan Bola Basket Siswa SMP. *Edukatif: Jurnal Ilmu Pendidikan*, 3(6), 5213–5219. <https://doi.org/10.31004/edukatif.v3i6.1655>
- Karisman, V. A., Syamsudar, B., & Supriadi, D. (2024). Kinestetik : Jurnal Ilmiah Pendidikan Jasmani Improving Playing Skills: Implementation of Play-Teach-Play in Football Training for the 6-9 Years Old Group. *Kinestetik : Jurnal Ilmiah Pendidikan Jasmani*, 8(2), 375–383. <https://ejournal.unib.ac.id/index.php/kinestetik/index>
- Lengkana, AS, & Muhtar, T. (2021). *Pembelajaran Kebugaran Jasmani* .



- CV Salam Insan Mulia.
- Indra, G., & Lumintuarso, R. (2014). Peningkatan Hasil Pembelajaran Lari Sprint 60 Meter Melalui Metode Permainan Sdn 009 Teluk Pelalawan. *Jurnal Keolahragaan*, 2(2), 155–169.  
<https://doi.org/10.21831/jk.v2i2.2611>
- Lengkana, A. S., & Sofa, N. S. N. (2017). Kebijakan Pendidikan Jasmani dalam Pendidikan. *Jurnal Olahraga*, 3(1), 1–12.  
<https://doi.org/10.37742/jo.v3i1.67>
- Nurwahidah, Maryati, S., Nurlaela, W., & Cahyana. (2021). Permainan Tradisional Sebagai Sarana Mengembangkan Kemampuan Fisik Motorik Anak Usia Dini. *PAUD Lectura: Jurnal Pendidikan Anak Usia Dini*, 4(02), 49–61.  
<https://doi.org/10.31849/paud-lectura.v4i02.6422>
- Sudirjo, E., & Sudrazat, A. (2024). Bagaimana Intervensi Gaya Hidup Aktif melalui Aktifitas Fisik pada Anak? Sebuah Tinjauan Sitematis. *Jurnal Pendidikan Kesehatan Rekreasi*, 10 (1), 109-123.
- Lengkana, AS, Tangkudung, J., & Asmawi, A. (2019). Pengaruh latihan core stability exercise (CSE) terhadap keseimbangan pada siswa sekolah dasar. *Jurnal Pendidikan, Kesehatan dan Olahraga*, 9 (4), 160-167.
- Syamsurrijal, A. (2020). Bermain Sambil Belajar: Permainan Tradisional Sebagai Media Penanaman Nilai Pendidikan Karakter. *ZAHRA: Research and Thought Elementary School of Islam Journal*, 1(2), 1–14.  
<https://doi.org/10.37812/zahra.v1i2.116>
- Widiyanti, L., Muslihin, H. Y., & Taopik, R. (2023). Meningkatkan Kemampuan Motorik Kasar Anak Usia 5-6 Tahun Melalui Permainan Tradisional Jaring Ikan. *Jurnal Pendidikan dan Konseling*, 5(1), 4093–4096.
- Sudirjo, E., & Sudrazat, A. (2024). Bagaimana Intervensi Gaya Hidup Aktif melalui Aktifitas Fisik pada Anak? Sebuah Tinjauan Sitematis. *Jurnal Pendidikan Kesehatan Rekreasi*, 10 (1), 109-123.
- Yosinta, S. I., Nasirun, M., & Syam, N. (2016). Meningkatkan Motorik Kasar Melalui Permainan Tradisional Lompat Kodok Septi Istinia Yosinta. *Jurnal Ilmiah Potensia*, 1(1), 56–60.
- Sudrazat, A. (2019). STUDI KASUS PEMBINAAN KARAKTER DI SEKOLAH KELAS OLAHRAGA. *Jurnal Ilmu Keolahragaan*, 2 (2), 46-54.
- Lengkana, AS, Saptani, E., Sudirjo, E., Rosalina, M., Hermawan, DB, & Sugiarto, BG (2022). Model Pembelajaran Koordinasi Gerak: Keterampilan Motorik Dasar Siswa SD. *JUARA: Jurnal Olahraga*, 7 (3), 683-691.
- Mulyan, A., & Anam, K. (2024). *Kinesmetik : Jurnal Ilmiah Pendidikan Jasmani The Impact of Traditional Peresean Sport on Physiological and Psychological Aspects and Its Role as Cultural Heritage : A Case Study of the Sasak Community in Lombok*. 8(3), 580–590.