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THE EFFECT OF TRADITIONAL LORE GAMES ON ENHANCING BASIC LOCOMOTOR SKILLS IN YOUNG CHILDREN

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Abstract

This study aims to determine the effect of tradisional Lore games on the fundamental locomotor movements of early childhood. The research uses an experimental method with a Pre-Experimental design, specifically a one-group pretest-posttest design. The population consists of children at TK Mesjid Raya Jihad, Padang Panjang, with a total sampling technique involving 18 children as samples. The results indicate that Lore games can enhance the fundamental locomotor skills of children. Before the treatment, the children's locomotor skills were at a low level, but these skills significantly improved after the treatment. These findings demonstrate the positive impact of Lore games on enhancing fundamental locomotor movements in early childhood.

Keywords: *Fundamental Locomotor Movements, Traditional Lore Games, Early Childhood.*

Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh permainan Tradisional Lore terhadap gerak dasar lokomotor anak usia dini. Penelitian ini menggunakan metode eksperimen dengan desain penelitian *Pre-Eksperimental*, tipe *one group pretest-posttest design*. Populasi penelitian adalah anak-anak di TK Mesjid Raya Jihad, Padang Panjang, dengan teknik pengambilan sampel menggunakan total *sampling*, melibatkan 18 anak sebagai sampel. Hasil penelitian menunjukkan bahwa permainan Lore dapat meningkatkan kemampuan gerak dasar lokomotor anak. Sebelum diberikan perlakuan, kemampuan gerak dasar lokomotor anak berada pada tingkat rendah, namun setelah diberikan perlakuan, kemampuan tersebut meningkat secara signifikan. Temuan ini menunjukkan adanya pengaruh positif permainan Lore terhadap peningkatan gerak dasar lokomotor pada anak usia dini.

Kata kunci: Gerak Dasar Lokomotor, Permainan Tradisional Lore, Anak Usia Dini.

INTRODUCTION

Childhood is a critical phase in human existence, representing the beginnings of growth and development (Bisma et al., 2023; Desmita et al., 2023; Warmansyah, Utami, et al., 2023). This time covers several critical periods, beginning with the early

stages of a child's existence and on to the next stage of development (Mulyanti & Bayan, 2022; Warmansyah, Yuningsih, et al., 2023; Yuningsih & Sari, 2023). All parts of growth must be appropriately fostered in order to function properly (Ismandela et al., 2023; Siskawati & Herawati, 2021). Specifically, the development of gross motor abilities in children's locomotor motions should be coordinated (D. A. Setyawan et al., 2018).

All parts of growth must be appropriately fostered in order to function properly. Specifically, the development of gross motor abilities in children's locomotor motions should be coordinated. The development of locomotor abilities in early life is critical because it establishes the groundwork for long-term physical health, coordination, and engagement in physical activities. Improving these abilities promotes not just physical growth but also cognitive and social development, allowing children to participate comfortably in a variety of activities and connect constructively with their peers (Derri et al., 2001).

Locomotor movement is an action in which the body moves from one location to another (Syahrial, 2015). Walking, running, and leaping are examples of fundamental locomotor activities. This movement is critical for supporting children's developmental potential in everyday life (Vanagosi, 2016). Children's locomotor abilities are critical for future success (Nisa & Suwardi, 2021). Physical activities such as running and climbing are used in games to enhance locomotor motions since they require muscle strength, endurance, and ability. These movement abilities will remain an important element of daily life (Hadi et al., 2017). Apriliani et al. (2020) define locomotor movement indicators as stepping, walking, running, leaping, hopping, crawling, creeping, tiptoeing, and rolling. According to Derri et al. (2013), locomotor motions can be indicated by walking, running, two-leg leaping, cranking, deer jumping, gliding, and skipping.

The goal of motor development is to introduce and train gross and fine motions, enhance the capacity to govern, control, and coordinate body movements, and build physical abilities and a healthy lifestyle that promotes robust and skillful physical growth (Farida, 2016). Previous study indicates that locomotor motions are critical for children's development (Linda & Rifki, 2020; McFadyen et al., 2001; Vasudevan et al., 2011). However, field observations suggest that the children at the Grand Jihad Mosque Kindergarten in Padang Panjang are still developing fundamental locomotor motions that are not appropriate for their age development stage. Children struggle

with motor coordination, such as supporting the body with their hands or stepping on the line when leaping. In addition, teachers frequently employ a boring teaching style that excludes learning outside of the classroom that promotes the development of locomotor skills.

For this reason, one technique that might be used is to provide traditional games from the West Sumatra region, known as legend games. Lore games, among other modern and traditional games, can aid in the development of basic locomotor motions in early childhood (Mukarromah et al., 2022). The legend game, also known as engklek, is a traditional game in Lembah Gumanti District, Solok. This game consists of sketching on the ground and using "stonek," a flat, square-shaped media thrown into a square dug into the ground (Fathurrohman, 2021). In certain regions, stonek/cak/gundu can be thrown at geometric images on the ground with money worth 100, 200, or 1,000 rupiah.

Lore games are appealing to children because they are enjoyable traditional games that assist youngsters understand the notion of numbers (Warmansyah et al., 2021). Lore is a jumping game that involves skill and contains an assistance system when players run into difficulties, as well as specific storyline carvings that may be stepped on. According to Authar et al., (2021), the game lore or engklek is a highly popular traditional game that can be found in several areas of Indonesia under various names such as tektek, ingkling, sundamanda, jlang jling, plate, ciplak gunung, demprak, dampu, box nine, and so on. The primary objective of this research is to investigate the effect of traditional lore games on enhancing fundamental locomotor skills in young children.

METHOD

This study used an experimental approach using a one-group pretest-posttest design. The experimental technique is a research method that examines the effect of a therapy on other variables under controlled circumstances. The study was carried out from December 2023 to December 2024 at the Mesjid Raya Jihad Kindergarten in Padang Panjang. The research population consisted of 18 children aged 5-6 years old from the Mesjid Raya Jihad Kindergarten in Padang Panjang, selected using a total sampling approach. Table 1 shows the data collecting procedure, which involves using an observation sheet with an instrument grid in table 1.

Table 1. Instrument Basic Locomotor Skill

Variable	Indicator	Indikator Items
Basic Locomotor Skills	Perform body movements in a coordinated manner	1. The child is able to support his body with his hands when taking the ucak 2. Children are able to position their bodies far from the edge of the lore box when jumping 3. The child is able to throw Ucak into a distant box well
	Able to move from place to place	1. Children are able to jump well into the box in the picture 2. Children are able to jump over one Lore box that has an opponent's ucak 3. Children are able to jump in a zigzag manner
	Accuracy in Playing Physical Games with Rules	1. Children are able to pick up the correct objects 2. Children walk into the correct arena 3. Children run in the specified direction 4. Children are able to jump according to predetermined game rules

The data in this study was analyzed using a complete t test. Before beginning therapy, a t test was performed on the pretest data to examine early differences in the development of fundamental locomotor movements. Following that, the research subjects received therapy, which in this case involved the use of conventional legend games. After the treatment period ended, a t test was performed on the posttest data to assess changes after the therapy was implemented. This study uses the t test to assess if the difference between pretest and posttest scores is statistically significant.

RESULTS AND DISCUSSION

Six tests were used to arrive at the research conclusions. The initial test was used as a pretest to determine the subjects' baseline levels prior to any treatment. This was followed by four therapy sessions designed to evaluate the children's

development in grasping number concepts. Finally, a posttest was administered to see if the children's ability to comprehend numerical ideas had improved since the pretest and treatment sessions.

The data in this study is regularly distributed, as evidenced by a normality test for each variable. The Shapiro-Wilk test was utilized for this purpose. The investigation was carried out with SPSS version 22, a statistical data management program. The normalcy test results are provided in the table below.

Table 2. Shows the Results of Hypothesis Testing Data on Children's Basic Locomotor Skills.

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Pretest	.192	18	.080	.924	18	.151
Postest	.218	18	.024	.909	18	.081
a. Lilliefors Significance Correction						

The results of the normality test on the pretest and posttest (using either the Kolmogorov-Smirnov or Shapiro-Wilk tests) indicate that the data used in the study is normally distributed. The pretest results showed a significance level of 0.056, which is higher than 0.05. The posttest findings were similar, with a significance level of 0.522, also higher than 0.05. As a result, it is verified that the data are normally distributed. This research utilized data that was both normally and homogeneously distributed and examined several assumptions. The homogeneity test table below demonstrates how the researchers used SPSS to identify data with a homogeneous distribution.

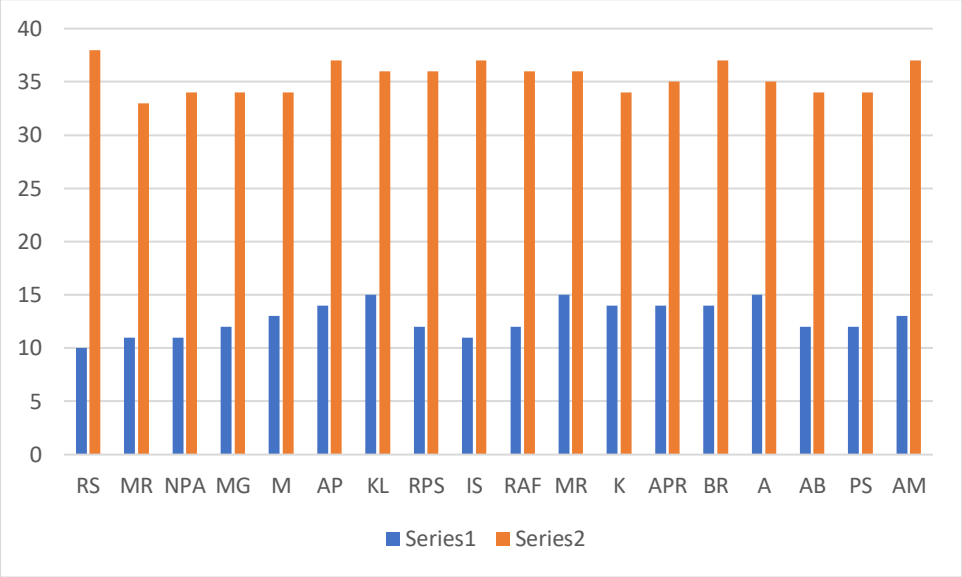
Table 3. Data from the Homogeneity Test

Test of Homogeneity of Variances			
Pretest			
Levene Statistic	df1	df2	Sig.
1.932	3	12	.178

Based on the findings of the normality test, the homogeneity test shows that the data utilized has a uniform distribution. The data are in fact homogeneous, as evidenced by the obtained significance level of 0.063, which is higher than the

significance threshold of 0.05. In addition, studies were conducted to evaluate the idea. Since the updated replies are based on empirical data gathered for analysis, this hypothesis is regarded as tentative. Following the acquisition of the treatment outcomes, this data must be evaluated using statistical tests to see if the outcomes are statistically significant.

Following the collection of treatment results, hypotheses are tested. The following phase involves analyzing the intervention data using statistical tests to determine the level of development in children's basic locomotor abilities through the traditional tale game. In this context, the t-test analysis is done as described in the table below:



Graph 1. Comparison of Basic Locomotor Skills

From the graph above, it can be seen that children's basic locomotor movement abilities have increased. Before the treatment, it was clear that the child's average score was 12.78 and after being given treatment, the child's basic locomotor movement ability increased to 35.39.

Table 4. Testing the Truth of the Alternative Hypothesis (Hα)

No	Code	*Pretest*	*Posttest*	D	D^2
1	RS	10	38	28	784
2	MR	11	33	22	484
3	NPA	11	34	23	529

4	MG	12	34	22	484
5	M	13	34	21	441
6	AP	14	37	23	529
7	KL	15	36	21	441
8	RPS	12	36	24	576
9	IS	11	37	26	676
10	RAF	12	36	24	576
11	MR	15	36	21	441
12	K	14	34	20	400
13	APR	14	35	21	441
14	BR	14	37	23	529
15	A	15	35	20	400
16	AB	12	34	22	484
17	PS	12	34	22	484
18	AM	13	37	24	576
Count		230	637	407	9275
Mean		12.78	35.39	22.61	515.28

The next step is to interpret the value of df = N-1 = 18-1 = 17, comparing the obtained t-value with the calculated t_0 = 47.1 and the critical t-value at a 1% significance level, which is t□1% = 2.5669. It is clear that t_o is greater than t□i.e., 47.1 > 2.5669. This means the alternative hypothesis is accepted: the Lore game significantly affects the basic locomotor skills of 5-6-year-old children in local B1 of TK Mesjid Raya Jihad Padang Panjang. This indicates a significant difference between the test results before and after the treatment on the sample. In conclusion, H_a is accepted, and H_0 is rejected, confirming that the Lore game is effective in improving the basic locomotor skills of 5-6-year-old children in that setting.

According to this research, before starting the treatment, the average score for children's basic locomotor skills was 12.35. After the treatment, the score increased to 35.39, with a rise of 22.61. This increase demonstrates that the Lore game has a significant impact on improving the basic locomotor skills of 5-6-year-old children. After receiving the treatment, each child experienced an improvement in basic locomotor skills through the Lore game. Out of 18 children, very good progress was observed in them. This shows that the Lore game can enhance children's basic locomotor skills. Before the treatment, not all children had good movement coordination, efficient transitioning abilities, or the capability to perform physical

movements according to the rules. Therefore, incorporating the Lore game into learning is necessary to improve children's basic locomotor skills.

The study highlights the significant impact of the Lore game on improving the basic locomotor skills of 5-6-year-old children. Locomotor skills are activities that result in the movement of the body from one point to another, such as running, walking, or rolling (Djuanda & Suryani, 2021). These foundational movements are crucial for children, who often struggle to perform them correctly, leading to discrepancies between desired and actual movements. Effective physical activities can help children accomplish tasks, especially during play (E. B. Setyawan, 2014).

The research findings align with the notion that physical activities influence the body's organs anatomically and physiologically. Engaging in physical activities significantly enhances health, physical fitness, and physical activity behavior. Games stimulate growth and improve organ function, with basic movement skills in games encompassing motor skills, non-motor skills, and manipulative skills (Muslihin, 2020).

Currently, traditional games are nearing extinction due to modernization and digitalization. This process must be slowed by preserving traditional games to maintain cultural values and support child development, particularly in motor skills (Muzakki & Fauziah, 2015). The Lore game, as demonstrated in this study, can develop various aspects of early childhood development, including cognitive, physical-motor, and social-emotional domains. Children learn number concepts and counting, as well as sharing and supporting their peers through Lore games (Pica, 2012).

Additionally, Lore games enhance agility, insight, and honesty. By hopping and overcoming obstacles, Lore games strengthen children's leg muscles (Husna, 2009). This study's results confirm the Lore game's effectiveness, showing that post-treatment scores for basic locomotor skills increased significantly from an average of 12.35 to 35.39, indicating a substantial improvement of 22.61 points. This improvement suggests that incorporating traditional games like Lore into early childhood education can foster better motor skill development. The research underscores the value of traditional games in enhancing children's physical abilities and preserving cultural heritage. The significant improvements in locomotor skills observed in this study affirm that traditional games like Lore should be integrated into educational curricula to promote holistic child development.

CONCLUSION

The Lore game traditional has a substantial effect on the basic locomotor skills of children aged 5–6 years at the Mesjid Raya Jihad Kindergarten in Padang Panjang. The t-value at the 1% significance level, t□1% = 2.5669, shows that t_0 is greater than t□, implying that 47.1 > 2.5669. So the null hypothesis is rejected, implying that there is a difference in fundamental locomotor movement skill ratings before and after playing the Lore game. Statistical testing revealed that children's basic locomotor skills improved significantly after participating in the Lore game. As a result, lore games may be utilized effectively to develop young children's basic locomotor skills.

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