

The Effect of the Traditional Game of Bola Nyawa on Improving Motor Skills

By Roni Muliadin



The Effect of the Traditional Game of Bola Nyawa on Improving Motor Skills

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Abstract

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Study purpose. Traditional games are now rarely played, even though they contain educational and social values, as they often involve physical activity, strategic planning, teamwork, agility, and bring a unique sense of joy. This study aims to describe the process and learning outcomes through traditional games in improving the motor skills of students at SD Negeri Kalembe, particularly fifth-grade students.

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Materials and methods. This study uses the Classroom Action Research method and uses a total sampling technique. The traditional game applied in this study is the Bola Nyawa game. The instrument used in this study is a motor skills test, with a sample of 5 students from Kalembe State Elementary School, Langgudu District, Bima Regency, the data analysis technique uses the SPSS version 22 application.

Result. Based on the significance value of the two-tailed test, the results obtained are 0.002; 0.001; and 0.003, all of which were smaller than 0.05 (sig < 0.05). The results of the study show that the traditional Bola Nyawa game can improve children's motor skills, which is indicated by the rejection of the null hypothesis (Ho) and the acceptance of the alternative hypothesis (Ha)

Conclusion. Thus, it can be concluded that the traditional game Bola Nyawa has a significant influence on improving students' motor skills.

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Keywords: traditional games, improving motor skills

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Introduction

Playing is a primary need for elementary-aged children because it is essential for their development. Every learning activity for children at the elementary level is expected to be enjoyable and meaningful. Playing is an effective way for children to learn. It is an activity carried out for enjoyment without focusing on the final outcome (Cendana and Suryana 2021). Every child in the world has the right to play (Hasanah 2016). By encouraging children to participate in games that represent local cultural heritage, it can instill a sense of pride and love for one's own culture, (Hasan, Husein, and Islam 2024). However, with technology becoming increasingly widespread in today's society, conventional or traditional games are gradually being neglected by children in our communities (Perdima and Kristiawan 2021). According to

(Wibowo and Irawan 2024), almost all developed societies follow the times in this globalization era. This can have a negative impact on their motor development. In line with the opinion of (Widiana, Rudsiyani, and Kusumawardani 2022), Excessive use of gadgets can affect children's physical activity, which in turn impacts their overall development. Therefore, an innovative and contextual approach is needed to restore children's enthusiasm for physical play through educational traditional games.

According to (Kusmiati and Sumarno 2018), Traditional games have benefits for various aspects of children's development. This is supported by the wide variety of games that promote motor skills, knowledge, as well as attitudes and behavior. According to (Mahfud and Yuliandra 2020) children's motor development is very important to pay attention to because it aligns with their characteristic of learning through play, thus requiring good motor skills to support their daily activities. Physical development can be observed while they are playing. Intellectual development can be seen in their ability to use or take advantage of their environment. One of the traditional games that is rarely played by children today is *Bola Nyawa*. According to (Maghfiroh 2020), In fact, when observed more closely, traditional games greatly help children in developing all aspects of their growth, as they contain many meaningful life values. In addition to supporting overall development in children, traditional games also serve to preserve local culture. These games rely on active movement, coordination, and social interaction among players, which indirectly contribute to the development of children's motor skills.

Motor skills are very important during the developmental stage of elementary school-aged children. According to (Ariani et al. 2022), Motor development is a movement that involves the integration of physical control through coordinated actions between the nervous system and muscles, as well as maturity in movement. At the age of 9–10 years, children are in the phase of strengthening fundamental motor skills such as running, jumping, throwing, and catching. Engaging in varied and enjoyable physical activities greatly supports the optimization of this development. The development of young people's character can greatly benefit from the various aspects of character education embedded in traditional games (Satriawan et al. 2023). The traditional game *Bola Nyawa* is played by two groups the throwing team and the playing team. The throwing team plays outside the boundary lines and their task is to throw the ball to hit the opponents (the playing team). Meanwhile, the playing team tries to avoid being hit by running or jumping. If the playing team manages to catch the ball ten times, they are considered the winners.



Figure 1. Students playing the traditional game Bola Nyawa.

The figure 1 traditional game *Bola Nyawa*, as a structured learning medium, can serve as a strategic solution. Through appropriate modifications and pedagogical approaches, this game can be used to enhance children's motor skills in a fun and effective way. This study aims to determine the influence and assess the effectiveness of the traditional game *Bola Nyawa* in improving the motor skills of fifth-grade students at SD Negeri Kalembe, Bima Regency.

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Materials and Methods

This study uses an experimental research design. The research was conducted using the total sampling method, with a sample consisting of five fifth-grade students at SD Negeri Kalembe, Bima Regency. The instrument used was a motor skills test.

Study participants

In this study, the researcher used a classroom action research method, conducted at SD N Kalembe, using the students themselves as the sample, consisting of fifth-grade students. The population in this study was 5 students. The limited student population involved in this study is due to the location of SD Negeri Kalembe, which is situated in a remote mountainous village in Langgudu District, Bima Regency. The majority of the village population consists of fewer than 100 households. Consequently, the number of students enrolled at SD Negeri Kalembe is very limited due to the low population, with each class having fewer than 10 students. Specifically, the fifth-grade class consists of only 5 students.

Study organization

The method used in this study is a quasi-experimental design. According to Creswell, as cited in (Rahmaniya and Haryanto 2024), this design was chosen because it allows for measuring the differences before and after the treatment within the same group, without the need for a control group.

The steps in this research involved applying the traditional game *Bola Nyawa* as a treatment to fifth-grade students at SD Negeri Kalembe, Bima Regency, over a period of 8 sessions within 4 weeks, meaning two sessions per week. The research design used was a one-group pretest–treatment–posttest design. In this design, a pretest is administered before the treatment and a posttest after the treatment. This allows the treatment results to be measured more accurately by comparing conditions before and after the intervention.

The data collection technique involved several motor skills tests related to the game being studied, including a 40-meter sprint, throwing and catching, and vertical jumping.

Statistical analysis

Before implementing the traditional game, the researcher administered a pre-test in the form of a motor skills test, followed by the application of the traditional game *Bola Nyawa*, and concluded with a post-test. The test items to be administered to the students were previously discussed and agreed upon by the validation team, which determined the appropriate motor skill tests for fifth-grade elementary students. The validation team recommended three items that could stimulate the motor skills of fifth-grade students: a 40-meter run (in seconds), a throw-and-catch test (30 seconds), and a vertical jump with a single leap (in centimeters).

Results

This study aims to determine the effect of the traditional game *Bola Nyawa* on improving the motor skills of fifth-grade students at SDN Kalembe, Bima Regency. Data analysis was conducted using SPSS version 22. This study used a sample or population consisting of five fifth-grade students.

The results of the data analysis are as follows:

Tabel 1. Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Lari_pre	.252	5	.200*	.947	5	.714
Lempar_pre	.201	5	.200*	.881	5	.314
Lompat_pre	.207	5	.200*	.948	5	.724

Based on the table 1, which presents the normality test, since the sample size in this study is fewer than 50, the Shapiro-Wilk test was used. According to the results shown in the Shapiro-Wilk table, the significance values are 0.714, 0.314, and 0.724, which are greater than 0.05 (sig > 0.05). Therefore, it can be concluded that the data in this study are normally distributed.

Table 2. Paired Samples Correlations t-test

	N	Correlation	Sig.
Pair 1 Lari_pre & Lari_post	5	.262	.670
Pair 2 lempar_pre & lempar post	5	.947	.015
Pair 3 Lompat_pre & Lompat_post	5	.991	.001

Based on the table 2 significance values in the table above running 0.670, throwing: 0.015, and jumping: 0.001, it can be interpreted that the traditional game *Bola Nyawa* had the most significant effect on jumping ability, as the result is less than 0.05 (sig < 0.05). The second most significant effect was on throwing and catching, while the smallest effect was on running.

Table 3. Paired Samples Test

	Paired 95% Confidence Interval of the Upper	t	df	Sig. (2-tailed)
Pair 1 Lari_pre – Lari_post.	1.73761	6.958	4	.002
Pair 2 Lempar_pre – Lempar_post.	-1.71991	-9.798	4	.001
Pair 3 Lompat_pre – Lompat_post.	-1.83983	-6.532	4	.003

Based on the table 3, the t-value is 6.958, and the two-tailed significance values are 0.002, 0.001, and 0.003, which are all less than 0.05 (sig < 0.05). This means that the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. Therefore, it can be concluded that the traditional game *Bola Nyawa* has a significant effect on improving the motor skills of fifth-grade students at SD Negeri Kalembe, Bima Regency.

Discussion

Based on observations and in-depth research on fifth-grade students at SD Negeri Kalembe, Bima Regency, it was found that the traditional game Bola Nyawa is a well-developed game. Through this traditional game, children's motor skills can be improved, including agility, speed, strength, and balance. The traditional game studied by the researcher Bola Nyawa was shown, based on research findings, to have a significant impact on improving the motor skills of fifth-grade students at SD Negeri Kalembe. Among the three test items assessed, jumping movements showed the most significant improvement. Specifically, traditional games can help develop various basic skills in children, such as fine and gross motor skills, basic math skills, and the ability to focus on problem-solving. They also foster the ability to interact and take turns with peers, communicate effectively, express joy during play, and develop motivation and patience-management skills. Additionally, such games support children's ability to determine spatial awareness and distance (Saputra and Ekawati 2017).

Children's fundamental motor skills are more likely to develop when there is an increase in physical activity. (Fitriani and Adawiyah 2018), argue that physical motor development plays an equally important role as other aspects of development. Motor development can serve as a primary indicator for assessing a child's growth and development. (Mahmud 2023) In the study, it is stated that gross motor activities, which are often carried out in groups, require children to constantly interact with their peers. Physical development is one of the stages in a child's development that shows significant progress. Physical motor development is defined as the development of elements of maturity and control of body movements, (Istiqomah and Suyadi 2019). In the study (Rizal 2021), Motor development becomes more refined and better coordinated compared to early childhood. Body balance improves, as does hand-eye coordination, which is essential for movements such as aiming, kicking, throwing, and catching. (Rizal 2021) "In the continuation of the study, it is stated that motor development varies in level for each individual. Some children may be able to jump and catch a ball easily, while others may only be able to catch a large or rolling ball.

The role of parents and teachers is also very important in the process of a child's motor development especially physical education teachers. In order to choose meaningful and appropriate physical or motor exercises for their students, teachers must have a strong foundation (Yuliani and Hanif 2024). (Amiruddin, Nurdin, and Sabilla 2024) According to the study, understanding the role of physical education (PE) teachers is a key factor in improving fundamental motor skills at the elementary school level. Based on the research findings. (Rahmatia Suci Eka Kurnia 2023), that the real role of the teacher as a facilitator in developing children's motor skills includes utilizing available learning resources in the school environment as enjoyable learning spaces, providing engaging life experiences, and effectively facilitating learning needs so that activities can run efficiently and effectively.

Based on the results above, it can be concluded that the traditional game *Bola Nyawa* contains several elements that can help develop a child's motor skills, both fine and gross motor skills. This is because there are several aspects that support the development of children's basic motor skills, namely: running, throwing and catching, and jumping. After observations were conducted, it can also be concluded that besides bringing joy to children, this game has a significant impact on the motor development of children at the elementary school age. Furthermore, the role of teachers and parents greatly influences the motor development of children at this stage. Parents and teachers are the key factors in developing children's motor skills, as they are the ones who are constantly present in the child's life.

Conclusions

Based on the research conducted, the researcher concludes that playing traditional games not only helps preserve cultural heritage but also enhances children's motor skills. This

is supported by the SPSS 22 calculation results, where the significance values from the two-tailed test were 0.002, 0.001, and 0.003 each of which is less than 0.05 (sig < 0.05). This indicates that the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. Therefore, it can be concluded that the traditional game Bola Nyawa has a significant effect on improving the motor skills of fifth-grade students at SD Negeri Kalembe, Bima Regency.

These findings suggest that physical activities through traditional games can enhance students' motor skill development. This research may serve as a reference for future studies investigating the impact of traditional games on students' motor skills. Additionally, it provides a foundation for developing more innovative, interactive, and enjoyable learning strategies.

References

- Amiruddin, A., A. Nurdin, and A. M. Sabilla. 2024. "Peran Guru Pendidikan Jasmani Olahraga Dan Kesehatan (Pjok) Dalam Meningkatkan Motorik Dasar Peserta Didik Kelas Rendah" *Jurnal Penjaskesrek* 11(1):44–54. <https://doi.org/10.46244/penjaskesrek.v11i1.2873>
- Ariani, Indri, Raisya Nafilah Lubis, Salsabila Henrita Sari, Yohana Fransisca, and Fauziah Nasution. 2022. "Perkembangan Motorik Pada Anak Usia Dini." *Jurnal Pendidikan Dan Konseling* 4:1349–58. <https://doi.org/10.31004/jpdk.v4i6.10444>
- Cendana, Herliana, and Dadan Suryana. 2021. "Pengembangan Permainan Tradisional Untuk Meningkatkan Kemampuan Bahasa Anak Usia Dini." *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini* 6(2):771–78. <https://doi.org/10.31004/obsesi.v6i2.1516>
- Fitriani, Rohyana, and Rabihatun Adawiyah. 2018. "Perkembangan Fisik Motorik Anak Usia Dini." *Jurnal Golden Age* 2(01):25. <https://ejournal.hamzanwadi.ac.id/index.php/jga/article/view/742>
- Hasan, Baharuddin, Muhamad Husein, and Syahrizal Islam. 2024. "Exploring Traditional Games with a Literature Review: How Do They Children's Motor Skills?" *Indonesian Journal of Physical Education and Sport Science* 4(4):442–52. <https://doi.org/10.52188/ijpess.v4i4.809>
- Hasanah, Uswatun. 2016. "Pengembangan Kemampuan Fisik Motorik Melalui Permainan Tradisional Bagi Anak Usia Dini." *Jurnal Pendidikan Anak* 5(1):717–33. <https://doi.org/10.21831/jpa.v5i1.12368>
- Istiqomah, Hascita, and Suyadi. 2019. "Perkembangan Fisik Motorik Anak Usia Sekolah Dasar Dalam Proses Pembelajaran." *Desember* 11(2):155–68. <https://doi.org/10.20414/elmidad.v11i2.1900>
- Kusmiati, Ai Melis, and Gano Sumarno. 2018. "Pengaruh Permainan Tradisional Terhadap Kemampuan Perseptual Motorik Anak Di SDN Margawatu II Garut Kota." *TEGAR: Journal of Teaching Physical Education in Elementary School* 1(2):17. <https://doi.org/10.17509/tegar.v1i2.11934>
- Maghfiroh, Yuli. 2020. "Peran Permainan Tradisional Dalam Membentuk Karakter Anak Usia 4-6 Tahun." *Jurnal Pendidikan Anak* 6(1):01–09. <http://dx.doi.org/10.23960/jpa.v6n1.20861>
- Mahfud, I., & Yuliandra, R. (2020). Pengembangan Model Gerak Dasar Keterampilan Motorik Untuk Kelompok Usia 6-8 Tahun. *SPORT-Mu: Jurnal Pendidikan Olahraga*, 1(01). 54-66. <https://doi.org/10.32528/sport-mu.v1i01.3055>
- Mahmud, Bonita. 2023. "Peran Guru Dalam Menstimulasi Kemampuan Motorik Kasar Pada Anak Usia Dini." *VOX EDUKASI: Jurnal Ilmiah Ilmu Pendidikan* 14(2):311–20. <https://doi.org/10.31932/ve.v14i2.2898>
- Perdima, Feby Elra, and Muhammad Kristiawan. 2021. "Nilai-Nilai Karakter Pada Permainan Tradisional Hadang Di Sekolah Dasar Feby Elra Perdima 1 □ , Muhammad Kristiawan 2." 5(6):5342–51. <https://doi.org/10.31004/basicedu.v5i6.1640>

- Rahmaniya, Nita, and Lutfin Haryanto. 2024. "JPK: Jurnal Pendidikan Dan Kebudayaan JPK: Jurnal Pendidikan Dan Kebudayaan." 01(03):6–11. <https://doi.org/10.56842/jpk.v2i3.616>
- Rahmatia Suci Eka Kurnia, Hilda. 2023. "Peran Guru Dalam Mengembangkan Motorik Anak Usia Dini." *Jurnal DZURRIYAT Jurnal Pendidikan Islam Anak Usia Dini* 1(2):91–98. <https://doi.org/10.61104/jd.v1i2.27>
- Rizal, Syamsur. 2021. "Perkembangan Fisik Anak Usia Dasar." 3(September):366–83. <https://doi.org/10.36088/pandawa.v3i3.1341>
- Saputra, Nofrans Eka, and Yun Nina Ekawati. 2017. "Permainan Tradisional Sebagai Upaya Meningkatkan Kemampuan Dasar Anak Tradisional Games in Improving Children'S Basic Abilities." *Jurnal Psikologi Jambi* 2(2):48–53. <https://doi.org/10.22437/jpj.v2i2.4796>
- Satriawan, Rabwan, Khairul Amar, Ainun Fitriani, Stkip Taman Siswa Bima, and Corresponding Author. 2023. "Tapa Gala Traditional Sports Games Based on Local Wisdom as Strengthening the Character of Mutual Cooperation." *IJPESS Indonesian Journal of Physical Education and Sport Science* 3(2):236–42. <https://doi.org/10.52188/ijpess.v3i1>
- Wibowo, Achmad Setiyo, and Fajar Awang Irawan. 2024. "Motion Analysis of Sreng Traditional Game: The Ideal Technique." *Indonesian Journal of Physical Education and Sport Science* 4(4):486–96. <https://doi.org/10.52188/ijpess.v4i4.865>
- Widiana, Wika, Isti Rudsyani, and Ratih Kusumawardani. 2022. "Penggunaan Gawai Terhadap Perkembangan Motorik Kasar Anak Usia 5-6 Tahun." *Jurnal Pendidikan Anak Usia Dini Undiksha* 10(3):440–48. <https://doi.org/10.23887/paud.v10i3.51352>
- Yuliani, Ris Dwi, and Mamun Hanif. 2024. "Peran Guru Dalam Pengembangan Motorik Kasar Anak Usia Dini Pada TK Aisyiyah Muhammadiyah Wangandowo." 2:158–68. <https://doi.org/10.61104/ihsan.v2i4.384>

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