

Development of athletic learning model through games in elementary school phase c learners

**Sutinah Sutinah^{1abc)*}, I Bagus Endrawan^{1cde)}, Martinus Martinus^{3abc)},
Selvi Melianty^{4abc)}**

^{1,2,4} Postgraduate Physical Education Study Program, Universitas Bina Darma

³Sports Education Study Program, Universitas Bina Darma

ABSTRACT

This study aims to develop a model of athletic learning through play in elementary school students in Banyuwangi. This study uses the ADDIE model (Analysis, Design, Development, Implementation, Evaluation) as the development framework. The subjects of this study were students of Grade V Elementary School in the District of Banyuwangi I, Kabupaten Banyuwangi, which has been validated, revised, and subjected to small- and large-scale trials. Expert validation involved three experts: a Games Expert (90%, Very Good category), a Fundamental Movement Expert (92%, Very Good category), and an Elementary School Learning Expert (88%, Good category), using questionnaire instruments. The average expert validation score was 90%, indicating that the athletics learning models 1 and 2 are feasible for use as athletics learning models in elementary school. This is reinforced by the results of the small- and large-scale trials. Based on small-scale trials, 99% of students were able to perform all movements in Models 1 and 2. In large-scale trials, 96% of students were able to perform the movements in Models 1 and 2. Based on both trials, it is concluded that Athletics Learning Models 1 and 2 are highly feasible for use in athletics learning. Researchers are further advised to develop athletics learning models at different grade or age levels, as well as test them in diverse regions or social contexts in order to generalize the model more broadly.

Keywords: development; learning model; athletics; children's games; elementary school

Received: 02 March 2026; Accepted 30 April 2026; Published 1 May 2026

OPEN ACCESS



Copyright © 2026 Sutinah Sutinah, I Bagus Endrawan, Martinus Martinus, Selvi Melianty

Corresponding Author: Sutinah Sutinah, Postgraduate Physical Education Study Program, Universitas Bina Darma, Indonesia

✉ email: sutinahatletik28@gmail.com

How to Cite: **Sutinah S., Endrawan I.B., Martinus M., Melianty S.** (2026). Development of athletic learning model through games in elementary school phase c learners, *Citius : Jurnal Pendidikan Jasmani, Olahraga, Dan Kesehatan*, 6(1), 63-70. <https://doi.org/10.32665/citius.v6i1.6369>

Authors' Contribution : a – Study Design; b – Data Collection; c – Statistical Analysis; d – Manuscript Preparation; e – Funds Collection

INTRODUCTION

Education has a very vital role in the development of a country. In Indonesia, education is developed through various pathways, both formal and informal. The curriculum prepared as a standard and reference for national education aims to ensure that the learning process can meet all students' needs, with a focus on students as the center of learning. In addition, education must also prepare every individual to be able to compete, survive, and adapt to existing competition. (Amirahlilis, 2023; Mughni, 2023; Rahmadayanti & Hartoyo, 2022).

Physical education is a process that is systematically and structurally designed for various physical activities in developing health, fitness, skills, and intelligence, while shaping balanced character and personality. Its main objective is to form quality individuals based on the values of Pancasila. Physical education learning begins at an early age, continues to the kindergarten level, then at elementary school as the initial stage, and continues throughout life (Febriani & Budiana, 2017). Physical education is also one of the elements of the curriculum implemented in schools at every level of education in Indonesia. Physical education is a learning process that refers to physical activities in order to improve students' skills in the affective, psychomotor, social, and cognitive aspects. (Hayatunnufus et al., 2022).

In physical education learning, there are often various obstacles that hinder the effectiveness of the learning process in schools, especially in athletics learning. Physical education usually focuses on teaching that follows the rules of each sport. This paradigm influences the perspective and mindset of physical education teachers. Observations in the field indicate that the management of physical education learning in elementary schools has not been optimal and is not aligned with students' development and growth, whether in terms of cognitive, affective, or motor aspects. (M. I. Najib et al., 2023)

Physical education is a subject that develops psychomotor, affective, cognitive abilities, and sportsmanship attitudes. In addition, physical education also aims to instill healthy lifestyle habits as part of character building. Physical education is also part of the school education curriculum that focuses on physical activities in supporting children's growth and development. (Lubis et al., 2022; Putra et al., 2024; Windary et al., 2022). Physical education, sports, and health have an important role in developing children's fundamental movement skills, including athletic skills such as running, jumping, and throwing. Various studies have been conducted to develop effective and enjoyable athletics learning models, especially at the elementary school level. Ambia et al., (2023) Maulana et al., (2023)

Athletics learning through a game-based approach focuses more on the mastery of fundamental movement skills, yet it can still serve as an engaging and enjoyable learning medium. (Afandi et al., 2024; Arianto et al., 2023; Suwanto et al., 2024). Research of (Zanki & Sriyanti, (2024) through the jumping game model successfully obtained good results in the large group trial under the good category, indicating that the model is feasible to be used Aliriad, (2024) Satria et al., (2024) also proves that fundamental movement learning based on small and traditional games is able to improve basic motor movement skills as well as increase motivation, self-confidence, and courage. Meanwhile, Musran et al., (2024) successfully developed a game-based throwing event learning model that was proven to be valid, practical, and efficient through small- and large-scale trials. Based on these results, it becomes increasingly clear that the development of a game-based athletics learning model can be an effective approach to improving fundamental motor skills as well as students' interest in physical activities, especially at the elementary school level (Purnomo et al., 2024).

Athletics is a sport that must be taught at all levels of education in Indonesia, in accordance with the Decree of the Minister of Education and Culture No. 0413/U/87. As the foundation of all sports, athletics encompasses fundamental movements walking, running, jumping, and throwing that underpin most physical activities and sports disciplines. Its essential role in physical education means that student motivation and engagement in athletics learning are directly tied to the quality and creativity of the instructional approach employed by teachers (Saputra, 2015).

This is particularly relevant in the context of the present study, which focuses on the development of a game-based athletics learning model for elementary school students in Banyuasin Regency. Based on the results of the researcher's initial observations at SD Negeri 27 Banyuasin I,

Banyuasin Regency, several problems were found, such as the limited availability of adequate facilities and infrastructure and the lack of utilization of existing facilities. In addition, teachers do not make modifications in the learning process, so learning especially in athletics material becomes monotonous. For example, during the main topic of walking, as well as when starting the topics of running, jumping, and throwing, the teacher only follows the contents of the textbook without any variation.

METHOD

Development research, often referred to as research and development (R&D), aims to solve practical problems. The model used in this study is the ADDIE model (Analysis, Design, Development, Implementation, Evaluation), which describes systematic and structured stages. This model is designed to achieve the desired outcomes by designing and optimizing the product to be effective and efficient. (Ariyani & Nurdyansyah, 2024; Sagita & Mulyani, 2023).

This research was conducted in Banyuasin Regency, with the small-scale trial carried out at SD Negeri 27 Banyuasin I, and the large-scale trial conducted at SD Negeri 15 Banyuasin I, SD Negeri 28 Banyuasin I, and SD Negeri 29 Banyuasin I. The study took place from December 2024 to February 2025. The research subjects consisted of 19 fifth-grade students from SD Negeri 27 for the small-scale trial, and 88 fifth-grade students from the three schools in the large-scale trial, with a total of 107 students (60 boys and 47 girls). The product trial design aimed to measure the effectiveness and benefits of the developed learning product through two stages: small-scale and large-scale trials.

Expert validation was conducted by three experts, namely a game expert, a fundamental movement expert, and an elementary school learning expert. The validation assessment used a questionnaire instrument to evaluate product quality based on content suitability, effectiveness, and relevance to student characteristics. To ensure the validity of the instrument, content validity was established through expert review, with each item assessed for its relevance and representativeness. Reliability of the questionnaire was measured using Cronbach's Alpha, confirming internal consistency across items prior to implementation. In addition, students were also given questionnaires covering cognitive, affective, and psychomotor aspects to measure their understanding, attitudes, and skills regarding the developed learning model. Data collection techniques included observation, documentation, and questionnaires, tailored for both teachers and students. Data analysis was carried out using descriptive quantitative methods with percentage formulas and classification of result categories based on Guilford's criteria to assess the feasibility of the developed learning model.

RESULTS AND DISCUSSION

This study aims to develop a game-based athletics learning model for elementary school students. The development procedure was carried out through several stages, starting from planning, small-scale trials, to large-scale trials. The results of this study were obtained from observation data, documentation, and questionnaires from experts and students. The results of the small- and large-scale trials were obtained from student questionnaires after participating in the game-based athletics learning model.

The validation results were obtained from the assessment of aspects including the quality of the model, its suitability to the characteristics of elementary school students, the feasibility of the material, and the effectiveness of the model.

Table 1. Results of the Small-Scale and Large-Scale Trials

No	School	Number of Students	Cognitive (%)	Affective (%)	Psychomotor (%)	Category
1	SD Negeri 27 (Small Scale)	19 students	83.12%	84.76%	86.45%	Good
2	SDN 15, SDN 28, SDN 29 (Large Scale)	88 students	85.23%	87.50%	89.20%	Very Good

Table 2. Expert Validation Results

No	Expert Name	Field of Expertise	Score (%)	Category
1	Expert 1	Games Expert	90%	Very Good
2	Expert 2	Fundamental Movement Expert	92%	Very Good
3	Expert 3	Elementary School Learning Expert	88%	Good

Table 2 presents the results of the expert validation conducted to evaluate the feasibility and quality of the developed PJOK teaching module based on variations of fundamental locomotor movements. The validation involved three experts with different fields of specialization, namely a games expert, a fundamental movement expert, and an elementary school learning expert. The scores obtained ranged from 88% to 92%, which fall into the categories of Good and Very Good. These results indicate that, from a content and pedagogical perspective, the developed module meets the required standards for implementation in elementary school physical education learning.

More specifically, the games expert (90%) and the fundamental movement expert (92%) rated the module in the Very Good category, suggesting that the learning activities are appropriate, varied, and aligned with the principles of motor skill development. Meanwhile, the elementary school learning expert provided a score of 88% (Good), indicating that the module is suitable for students' characteristics and developmental levels, although minor improvements may further optimize its implementation. Overall, the expert validation results confirm that the teaching module is valid, appropriate, and feasible to be used as instructional material in PJOK learning at the elementary school level.

Table 3. Athletics Learning Model Through Games

No	Post Name	Activity/Game	Activity Steps
1	MPA 1 – Post 1	Walking in place, running, picking up a ball according to the teacher's instructions	1) Stand upright behind the starting line. 2) Walk in place from one box to another while answering the teacher's questions. 3) Run to the basket and take a ball according to the color instructed by the teacher. 4) Return to the starting line.
2	MPA 1 – Post 2	Group walking and jumping activity	1) Students are divided into groups of four, line up and hold hands while carrying flashcards. 2) Walk forward for 15 meters. 3) Jump over hoop rings (one-foot jump). 4) Take the matching flashcard. 5) Return to the starting line.
3	MPA 1 – Post 3	Relay run passing the ball and message	1) Groups consist of four students, each covering 50 meters. 2) Runner 1 receives a message from the

4	MPA 2 – Post 4	“Heaven and Hell” one-foot jumping game	teacher and holds a ball. 3) Run and pass the message and the ball to Runner 2, and so on until Runner 4. 4) Runner 4 runs to the finish line and delivers the message to the teacher. 1) Students are divided into groups of four. 2) The player jumps forward across six hoop rings. 3) If the teacher says “heaven” → jump with the right foot; if “hell” → jump with the left foot. 4) If all jumps are correct, the player takes a reward at the finish line.
5	MPA 2 – Post 5	Walking, zig-zag running, and box jumping	1) Groups of four students. 2) Walk straight along a patterned rope for 6 meters, then continue with a 5-meter zig-zag run. 3) Jump over a 40 cm box. 4) Take a flag according to the teacher’s instruction, then return to the starting line. 1) Groups of four students. 2) Player 1 pushes the kaper ball using a sideways style. 3) The teacher marks the landing point of the ball. 4) Player 2 continues the push from that point. 5) The activity continues until Player 4. 6) The final push result is recorded by the teacher. The game ends.
6	MPA 2 – Post 6	Ball push relay	

The products produced in this study are Athletics Learning Models (ALM) 1 and 2 in the form of two athletics learning models, where Model 1 consists of three stations and Model 2 also consists of three stations. As shown in Table 1, the results of the small-scale trial indicated scores of 83.12% (cognitive), 84.76% (affective), and 86.45% (psychomotor), categorized as Good. The large-scale trial yielded higher scores of 85.23% (cognitive), 87.50% (affective), and 89.20% (psychomotor), categorized as Very Good. These results indicate that the game-based learning approach positively influenced all three learning domains. The improvement in the cognitive domain reflects students’ increased understanding of athletic movements and game rules. The higher affective scores suggest that students demonstrated greater enthusiasm, cooperation, and positive attitudes during learning activities. Meanwhile, the psychomotor domain consistently showed the highest scores, confirming that the game-based stations effectively facilitated the development of fundamental movement skills. The overall results confirm that the developed learning model is able to create enjoyable and effective learning experiences for elementary school students. According to Novanti & Iriaji, (2024) Pratama et al., (2024) states that interest is a feeling of preference and attraction toward something or an activity without being told to do so. With athletics learning that has been modified by the teacher, students will feel happy and a high level of learning interest will be formed within them. High learning interest will help students to be active in the learning process and have the opportunity to master the skills being taught and achieve optimal learning outcomes. Meanwhile, according to Panggabean et al., (2024) in athletics learning at the elementary school level, characteristics must be emphasized to bridge the gap between the teacher’s expectations and the children, so that the message can be conveyed according to their developmental level. An important factor in athletics learning in elementary schools is the element of enjoyment experienced by children during the learning activities.

Physical education teachers are therefore expected to create learning models that are both effective and enjoyable, adapted to the play-oriented characteristics of elementary school children,

without neglecting the core learning objectives (F. A. Najib et al., 2024; Subrata, 2023). In addition to effective learning, an authentic assessment process is required so that students' competencies across cognitive, affective, and psychomotor domains are comprehensively captured and reflected in learning outcomes.

CONCLUSION

Based on the results of the analysis and discussion, it can be concluded that the product developed from the athletics learning model has been proven valid and effective for use by students in the teaching and learning process. The validation results from three experts—namely a fundamental movement development expert, a game expert, and an elementary school learning expert—indicate that this learning model is highly feasible to use, with validation scores of 92% (fundamental movement expert), 90% (game expert), and 88% (elementary school learning expert), yielding an average of 90% in the Very Good to Good category. The small-scale trial showed that 99% of students were able to perform all movements in Athletics Learning Models 1 and 2, while the large-scale trial demonstrated a success rate of 96%, with cognitive, affective, and psychomotor domain scores consistently categorized as Very Good. Thus, Athletics Learning Models 1 and 2 are highly appropriate for use in athletics learning at the elementary school level. Future researchers are recommended to further develop this model by adding new station variations, particularly for throwing and jumping materials, so that learning becomes more enjoyable and engaging for students.

REFERENCES

- Afandi, S. N., Harmono, S., Firdaus, M., & Becti, R. A. (2024). Pengaruh Latihan Circuit Training Terhadap Kecepatan Lari Sprint 50 Meter Pada Siswa Putra Kelas Ix Uptd Smpn 2 Semen Kabupaten Kediri. In *Jurnal Ilmiah Penjas (Penelitian, Pendidikan Dan Pengajaran)* (Vol. 10, Issue 1, Pp. 69–80). Universitas Tunas Pembangunan. <https://doi.org/10.36728/Jip.V10i1.3203>
- Aliriad, H. (2024). Improvement Of Motor Skills And Motivation To Learn Physical Education Through The Use Of Traditional Games. *Physical Education Theory And Methodology*, 24(1), 32–40. <https://doi.org/10.17309/Tmfv.2024.1.04>
- Ambia, F., Zahara, Z., Ifwandi, I., & Rinaldy, A. (2023). Hubungan Power Otot Lengan Terhadap Kemampuan Lempar Lembing. In *Jurnal Penjaskesrek* (Vol. 10, Issue 2, Pp. 64–75). Stkip Bina Bangsa Getsempena. <https://doi.org/10.46244/penjaskesrek.V10i2.2201>
- Amirahlilis, P. G. (2023). *Keadaan Pendidikan Saat Ini Dan Inovasi Kurikulum Merdeka Belajar*. Center For Open Science. <https://doi.org/10.31237/osf.io/m6wv9>
- Andrianto, J. R. (2024). Pendampingan Pengembangan Bakat Dan Minat Sepak Bola Bagi Anak Usia Dasar. In *Insan Cendekia : Jurnal Pengabdian Kepada Masyarakat* (Vol. 2, Issue 2, Pp. 96–103). Man Insan Cendekia Jambi. <https://doi.org/10.46838/ic.V2i2.616>
- Arianto, M. T., Nur, S., & Yusuf, M. (2023). Pengaruh Penggunaan Sarana/Media Modifikasi Pada Pembelajaran Olahraga Atletik Lempar Lembing Terhadap Minat Belajar Siswa. In *Musamus Journal Of Physical Education And Sport (Mjpes)* (Vol. 5, Issue 2, Pp. 10–18). Universitas Musamus Merauke. <https://doi.org/10.35724/mjpes.V5i02.5170>
- Ariyani, S. M., & Nurdyansyah. (2024). The Effectiveness Of Technology-Based Interactive Learning Media To Improve Students' Cognitive Skill At Islamic Elementary School. In *Jip Jurnal Ilmiah Pngmi* (Vol. 10, Issue 1, Pp. 1–15). State Islamic University Of Raden Fatah

- Febriani, N. S., & Budiana, D. (2017). Upaya Mengembangkan Nilai-Nilai Kerjasama Melalui Penerapan Permainan Tradisional Bakiak Dan Gatrik. *Tegar Journal Of Teaching Physical Education In Elementary School*, 1(1), 33–41. <https://doi.org/10.17509/Tegar.V1i1.8673>
- Hayatunnufus, Q., Kusuma, L. S. W., & Sucipto, E. (2022). Metode Bermain Di Lingkungan Pantai Sebagai Upaya Meningkatkan Kemampuan Lompat Tinggi Siswa Sekolah Menengah Pertama. In *Discourse Of Physical Education* (Vol. 1, Issue 1, Pp. 14–25). Lembaga Penelitian Dan Pemberdayaan Masyarakat - Litpam. <https://doi.org/10.36312/dpe.v1i1.606>
- Lubis, A. M., Kasih, I., & Simatupang, N. (2022). Pengembangan Permainan Edu Game Model Circuit Untuk Anak Tunagrahita Ringan. *Jurnal Pedagogik Olahraga*, 8(1), 13–18. <https://doi.org/10.24114/jpor.v8i1.41964>
- Maulana, R. F., Irawan, A. A., & Gustiawati, R. (2023). Modifikasi Media Roket Terhadap Hasil Belajar Lempar Lembing Siswa Smp Negeri 1 Terisi. In *Jendela Olahraga* (Vol. 8, Issue 1, Pp. 1–10). Universitas Pngri Semarang. <https://doi.org/10.26877/jo.v8i1.12491>
- Mughni, M. S. (2023). Desain Kurikulum Merdeka Belajar Dan Transformasi Evaluasi Pendidikan Agama Islam. In *Jurnal Ilmiah Pendidikan Kebudayaan Dan Agama* (Vol. 1, Issue 2, Pp. 97–107). Cv. Alim's Publishing. <https://doi.org/10.59024/jipa.v1i2.169>
- Musran, M., Syahrianursaifi, S., Kurniawan, E., Yulinar, Y., & Husaini, H. (2024). Pengembangan Model Pembelajaran Atletik Nomor Lempar Lembing Bentuk Permainan Untuk Siswa Sekolah Dasar. In *Jurnal Dedikasi Pendidikan* (Vol. 8, Issue 1). Universitas Abulyatama. <https://doi.org/10.30601/dedikasi.v8i1.4084>
- Najib, F. A., Rahayu, T., & Kusuma, D. W. Y. (2024). Pengembangan Pembelajaran Senam Irama Menggunakan Media Interaktif Lectora Inspire Pada Sekolah Dasar Gugus Ayodya Kota Semarang. In *Jiip - Jurnal Ilmiah Ilmu Pendidikan* (Vol. 7, Issue 1, Pp. 176–180). Ainara. <https://doi.org/10.54371/jiip.v7i1.3203>
- Najib, M. I., Athar, A., & Shadiqin, A. R. (2023). Analisis Kebugaran Jasmani Pasca Pandemi Covid-19 Peserta Dididk Sdn 1 Landasan Ulin Utara Kelas V Usia 10-12 Tahun. In *Stabilitas: Jurnal Pendidikan Jasmani Dan Olahraga* (Vol. 4, Issue 3, Pp. 199–203). Center For Journal Management And Publication, Lambung Mangkurat University. <https://doi.org/10.20527/mpj.v4i3.2304>
- Novanti, A. D., & Iriaji, I. (2024). Pengembangan Pop Up Book Permainan Tradisional Egrang Untuk Mengembangkan Karakter Anak Di Kampung Budaya Tanoker Kabupaten Jember. In *Jolla Journal Of Language Literature And Arts* (Vol. 4, Issue 4, Pp. 391–406). State University Of Malang (Um). <https://doi.org/10.17977/um064v4i42024p391-406>
- Panggabean, M. A., Indah, E. P., & Fauzan, L. A. (2024). Identifikasi Bakat Olahraga Berdasarkan Potensi Wilayah Di Sdn 3 Teluk Dalam Banjarmasin. In *Sprinter: Jurnal Ilmu Olahraga* (Vol. 5, Issue 1, Pp. 122–128). Man Insan Cendekia Jambi. <https://doi.org/10.46838/spr.v5i1.510>
- Pratama, R. S., Priyanto, Ramadhan, I., Irawan, Y., Mahardika, W., & Tulyakul, S. (2024). Akselerasi Peningkatan Manajemen Pembinaan Olahraga Petanque Di Kabupaten Kendal. In *Proficio* (Vol. 6, Issue 1, Pp. 66–74). Universitas Tunas Pembangunan. <https://doi.org/10.36728/jpf.v6i1.3970>
- Purnomo, T. J., Adi, S., Darmawan, A., & ... (2024). Pembelajaran Pendidikan Jasmani Model Cooperative Learning Tipe Jigsaw Terhadap Peningkatan Hasil Belajar Ranah Kognitif, Afektif & Psikomotor. *Jurnal Pembelajaran ...* <https://elibrary.ru/item.asp?id=81013840>

- Putra, C. P., Yuliawan, E., Prabowo, B. Y., & Yani, Y. A. S. (2024). Pengaruh Variasi Gerak Latihan Running Abc Terhadap Kecepatan Lari 60 Meter Pada Siswa Ekstrakurikuler Atletik Siswa Menengah Pertama. In *Jurnal Prestasi* (Vol. 8, Issue 2, Pp. 53–62). State University Of Medan. <https://doi.org/10.24114/Jp.V8i2.64385>
- Rahmadayanti, D., & Hartoyo, A. (2022). Potret Kurikulum Merdeka, Wujud Merdeka Belajar Di Sekolah Dasar. In *Jurnal Basicedu* (Vol. 6, Issue 4, Pp. 7174–7187). Universitas Pahlawan Tuanku Tambusai. <https://doi.org/10.31004/basicedu.V6i4.3431>
- Sagita, M., & Mulyani, P. K. (2023). Numeracy E-Module With Edugame As A Support For Mathematics Learning For Sixth-Grade Elementary School Students. *Journal Of Education Technology*, 7(3), 439–448. <https://doi.org/10.23887/Jet.V7i3.65920>
- Saputra, I. (2015). Modifikasi Media Pembelajaran Pendidikan Jasmani Sekolah Dasar. In *Jurnal Ilmu Keolahragaan*.
- Satria, M. H., Aliriad, H., Nuzulia, D., Mangngassai, I. A. M., Junaidi, I. A., & Zainuddin, M. (2024). Game-Based Physical Education Learning To Improve Basic Manipulative Movement Skills In Primary School Children. In *Edelweiss Applied Science And Technology* (Vol. 8, Issue 6). Learning Gate. <https://doi.org/10.55214/25768484.V8i6.3756>
- Sri, S. W., Luthfa, N., Alfin, H. N., Arif, S., & Inayatul, C. (2022). *Descriptive Level Of Learning Motivation On Students ' Indonesian Communication Ability From Axiological Perspective. 1*, 89–94.
- Subrata, I. P. N. N. (2023). Dukungan Orangtua Dan Lingkungan Sosial Terhadap Motivasi Belajar Dan Hasil Belajar Pendidikan Jasmani, Olahraga, Dan Kesehatan. In *Jurnal Ilmu Keolahragaan Undiksha* (Vol. 11, Issue 1, Pp. 7–15). Universitas Pendidikan Ganesha. <https://doi.org/10.23887/Jiku.V11i1.56214>
- Sukamto, M., Putri, W. S. K., & Aliriad, H. (2021). Survei Minat Peserta Didik Dalam Pembelajaran Virtual Pendidikan Jasmani Dengan Media Audio Visual. *Citius: Jurnal Pendidikan Jasmani, Olahraga, Dan Kesehatan*, 1(2), 21–25.
- Suwanto, W., Atiq, A., Subekti, B. P., Zurhan, Z., Trivion, P., Arian, F. T., Sumirat, I., Putra, P. G., Damianusdarmo, D., Nanda, S. D., Karin, M., Saputra, R., & Tongge, Y. T. (2024). Peningkatan Lompat Jauh Melalui Penerapan Teams Games Tournament Pada Anak Autis Di Sekolah Luar Biasa Dharma Asih Pontianak. In *Jurnal Pendidikan Olahraga* (Vol. 14, Issue 2, Pp. 31–36). Stkip Taman Siswa Bima. <https://doi.org/10.37630/Jpo.V14i2.1606>
- Windary, W., Mahardhika, D. B., Sumarsono, R. N., & Suherman, A. (2022). Pengaruh Penggunaan Alat Modifikasi Pipa Aluminium Terhadap Kemampuan Lempas Lembing Pada Siswa Sma Negeri 1 Setu Kabupaten Bekasi. In *Gelanggang Olahraga: Jurnal Pendidikan Jasmani Dan Olahraga (Jpjo)* (Vol. 6, Issue 1, Pp. 61–70). Ipm2kpe. <https://doi.org/10.31539/Jpjo.V6i1.4447>
- Zanki, A. S., & Sriyanti. (2024). Pengaruh Permainan Lompat Tali Terhadap Kemampuan Motorik Kasar Anak Pada Kelompok B Di Tk Aba “Alam” 2 Bojonegoro. In *At-Thufail Jurnal Pendidikan Islam Anak Usia Dini* (Vol. 1, Issue 2, Pp. 93–98). Sekolah Tinggi Ilmu Tarbiyah Muhammadiyah Bojonegoro. <https://doi.org/10.59829/W3y6tg62>