

Progressive Dribbling Learning Model to Improve Dribbling Skills in Elementary School Children Aged 9–12 Years at SD IT Mutiara

Atthariq Alwin¹, Rizki Mulyawan²

^{1,2}Departement of Sport Science, Faculty of Sport and Health Sciences, Yogyakarta State University, Yogyakarta, Indonesia

ABSTRACT: This research aims to develop a feasible, practical, and effective progressive dribbling learning model to improve dribbling skills in elementary school children aged 9–12 years. The research was motivated by the low dribbling skills of students due to learning models that are still conventional, lack variety, and do not consider the characteristics of children's motor development according to age. The product developed is called the Progressive Islamic Soccer Dribbling Model (PISDM), a progressive training model that integrates gradual dribbling technique learning, a multimedia approach, game activities, and reinforcement of Islamic values.

This research used the Research and Development (R&D) method with the ADDIE (Analysis, Design, Development, Implementation, Evaluation) development model. The research subjects were 34 students in grades IV–VI of SD IT Mutiara Duri aged 9–12 years. Data collection techniques included observation, interviews, documentation, dribbling skills tests, and expert validation. Data were analyzed using quantitative and qualitative descriptive analysis through the results of the dribbling skills pretest and posttest. The results showed that the product developed was a progressive learning model consisting of 3 meeting sessions covering ball mastery, zig-zag cone, figure-8 turn, and samba passing-dribbling.

The implementation of the model provided an increase in dribbling skills in all measurement instruments. The average Boomerang Dribble score increased from 32.56 to 34.53, Triangle Dribble increased from 13.82 to 15.40, Modified Slalom Dribble increased from 21.51 to 23.94, while Illinois Football Dribble showed the highest average increase with a difference of 3.33 points after the implementation of the model. These results indicate that the progressive dribbling model can gradually improve students' ball control, speed, agility, and maneuverability, in accordance with the motor development characteristics of elementary school-aged children. Based on these results, it can be concluded that the Progressive Islamic Soccer Dribbling Model (PISDM) is suitable for use as an alternative soccer learning and training model for elementary school students aged 9–12 years because it can improve dribbling skills in a more systematic, engaging, and developmentally appropriate manner.

KEYWORDS: development model, dribbling, soccer, elementary school, ADDIE, dribbling skills, PISDM

I. INTRODUCTION

Physical education in Indonesian primary schools should be the main pillar of the formation of basic motor skills in early childhood, which includes dribbling skills in football (Arga, 2025). The sport of football, as an essential activity to support physical development, ankle coordination, and agility holistically, from the national to the local level. The reality of the field shows a serious incompatibility, where many elementary schools apply rigid, monotonous, non-innovative teaching approaches, so that children fail to master basic football techniques, even at a simple level such as dribbling over conventional obstacles (Firdaus, 2025).

The main weakness of the dribbling model that has been applied so far is the use of uniform training patterns for all elementary school age groups without paying attention to the gradual stages of children's motor development. Existing training models tend to emphasize only the repetition of basic techniques without the progression of difficulty, so that students' dribbling skills develop slowly and immeasurably. The lack of variety of exercise activities causes students to feel bored easily so that their motivation and involvement in the dribbling learning process decreases (Sahabuddin et al., 2025).

Ideally, football functions as a means of entertainment, as well as shaping the character of teamwork, discipline, and optimal physical fitness from elementary school age (Firmansyah, 2025). However, the real situation is the opposite, as exercise is often general, with no specific age range adjustments, so that children aged nine to twelve experience developmental stagnation, and lag far behind peers in countries with structured student sports programs. The root factor of the fundamental problem lies in the

Progressive Dribbling Learning Model to Improve Dribbling Skills in Elementary School Children Aged 9–12 Years at SD IT Mutiara

lack of a specific training model, which takes into account the child's gross motor stage in that phase, where they are ready to understand complex instructions, increase the strength of the leg muscles, and coordinate more precisely (Firmansyah, 2025).

The characteristics of children aged 9-12 years also show significant differences in abilities at each age level (G. N. Putra et al., 2022). 9-year-olds tend to still be at the stage of mastering basic coordination and need simple exercises in the form of games. 10-year-olds are starting to be able to combine speed and ball control. 11-year-old children have better concentration and balance of motion so that they can be given a variety of combination exercises. Meanwhile, 12-year-olds have begun to be able to receive simple tactical instruction and dribbling exercises with higher levels of difficulty. These differences in characteristics have not been accommodated in the dribbling training model used in elementary schools today.

The conventional approach, which mimics adult training, causes students aged 9-12 years to become bored, give up quickly, and lose interest in sports, exacerbated by the lack of facilities, limited aids, and inadequate training spaces in public and private elementary schools, large suburbs (Tumanggor, 2025). This creates a gap between the ideal expectations of national physical education, and contradictory daily practices. The root of the problem, which centers on the inability of physical education teachers to adapt exercises to the characteristics of early childhood due to the lack of training and contextual model references, so that dribbling practice becomes a boring routine, with no measurable progress (Tumanggor, 2025). The dribbling model used by teachers does not yet have clear progressive stages ranging from basic ball control exercises, changes of direction, dribbling speed, to dribbling skills in simple game situations. As a result, teachers have difficulty evaluating the development of students' skills based on the level of ability of their respective ages.

At the national level, the Ministry of Education targets improving student sports achievement through the Independent Curriculum, which emphasizes age-based skills, but the reality on the ground shows a failure of implementation, as schools still rely on outdated traditional methods (Gani, 2025). Children should enjoy the process of learning fun sports, building confidence, and a lifetime of physical activity. The harsh reality actually shows a decrease in participation due to unattractive exercises, so many students are lazy to exercise and choose indoor activities or gadgets instead of practicing football (Bambang, 2024). In fact, the Independent Curriculum requires differential learning that adjusts the abilities and characteristics of students' development. This shows the need for a progressive dribbling model that is able to accommodate differences in children's abilities in each age range of 9-12 years in a systematic and gradual manner.

This was exacerbated by previous pandemics, which limited field access, and hoarded latent motor problems in the urban young generation (Alfisahrin, 2025). Teachers are often overloaded with administrative tasks, so that practice innovations are neglected, creating a vicious circle of low teaching quality. This contradictory situation not only hinders individuals, but also weakens the reserves of future national athletes. It is important to immediately identify these roots, so that targeted interventions can be carried out before it is too late (Rezky, 2024). One of the solutions that can be offered is the development of a progressive dribbling model based on age stages, which combines basic technique exercises, interactive games, difficulty level variations, and gradual skill evaluation so that students can develop according to their motor skills.

Based on the results of an in-depth interview with 1 physical education teacher and the principal of IT Mutiara Duri Elementary School Riau, it revealed a striking fact that, out of 30 students in grades 4, 5, and 6 with an average age of 9-12 years, it showed that only 8% of students were able to dribble smoothly through five simple obstacles within one minute. Teachers report that 92% of students experience basic difficulties, such as losing control of the ball, failing to change direction quickly, or lack of kicking power due to generic exercises not being adjusted for age. The causative factor is that IT Mutiara Duri Elementary School is classified as a multicultural school in this integrated Islamic school has a busy schedule of religious, academic, and extracurricular lessons, so that students feel tired, sports motivation decreases drastically without an attractive exercise model. The teacher also explained that the exercises given to grade 4 students are still the same as grade 6 students, so that younger children find it difficult to follow the exercises, while older students feel that the exercises are too easy and monotonous.

Based on interviews with teachers, PJOK also said that parents of students of IT Mutiara Duri Elementary School also often conveyed to teachers related to children who complained that they often went home tired without real achievements in the physical field, this exacerbated negative perceptions of physical education. Supported by field observation data for two days, it showed that the absence of training reached 30% due to boredom and lack of variety. Senior teachers recognize the urgent need for a new model, which integrates elements of Islamic play to increase participation. The findings of these interviews provide empirical evidence of local conditions, which prompt research into the development of a dribbling training model in specific football at 9-12 years of age. The progressive dribbling model developed in this study is designed not only to improve technical skills, but also to create fun learning through age-appropriate training stages, the use of small games, colored cones, group challenges, and a light competition approach that suits the character of elementary school children.

Progressive Dribbling Learning Model to Improve Dribbling Skills in Elementary School Children Aged 9–12 Years at SD IT Mutiara

Based on the description above, it is important for researchers to raise a study entitled "Development of Progressive Dribbling Models to Improve Dribbling Skills in Elementary School Children Aged 9-12 years", to change the reality of problems on the field. This research addresses the root problems of facilities, methods, motivation holistically, preventing the long-term impacts of physical degradation, national achievement, and social inequality through a field-tested model. The development of a progressive dribbling model is expected to be able to become a physical education learning innovation that is relevant to the developmental characteristics of elementary school-age children, so that dribbling skills can be improved gradually, measurably, and sustainably.

II. METHODS

The development model in this study is based on a research and development (R&D) approach, because this study focuses on the preparation of a prototype of a specific dribbling skills training model for children aged 9–12 years at SD IT Mutiara Duri (Waruwu, 2024). This model not only modifies one or two forms of training, but compiles a structured training system that starts from an opening with Islamic nuances, an age-adaptive technical training core, to a closure that contains value reinforcement. Thus, the resulting product is not just a lesson plan or a single module, but a model of a training framework that can be replicated by PJOK teachers in the context of integrated Islamic elementary schools (Sugiyono, 2016).

The development of the model was based on an analysis of field needs (low dribbling ability conditions, decreased motivation, limited facilities, and tight schedules) as well as theoretical studies on dribbling, motor development aged 9–12 years, and effective training models. The results of the analysis were then translated into a design of 12 integrated training sessions, 60 minutes per session, 3 times a week for 8 weeks. Each group of three sessions is designed to have an adaptive focus: ball mastery for basic ball possession, zig-zag cone for agility and change of direction, figure-8 turn for sustained maneuvering, and samba passing dribbling for dribbling integration with simple passing. This gradual pattern reflects the principle of progressive training according to age characteristics ((Firmansyah, 2025) (Gani, 2025) (Rezky, 2024).

An important feature of this development model is the integration of Islamic values and a progressive multimedia approach. Each session begins with "Bismillah", a prayer for safety, and strengthening the intention and motivation of "trying to play right", followed by a halal team building game without hard contact as a fun warm-up. The core part of the exercise is reinforced with a 5-minute video tutorial per session as a visual-auditory medium to help children understand dribbling techniques in a more concrete and interesting way. The closing of the session always ends with the religious motivation "Win and lose Allah's business, play sincerely" which instills an attitude of sportsmanship, sincerity, and maximum effort, so that sports activities are positioned as part of worship ((Firmansyah, 2025) (Gani, 2025) (Rezky, 2024).

Technically, this development model formulates detailed field specifications, tools, and evaluation indicators to make them easy to implement and measure. The exercise took place in an area of 1/2 circle of 20 x 15 meters with 6 small adjustable goals (1–2 meters), a size 4 ball (410–450 grams), 20 cones, and a stopwatch to measure time. The evaluation of dribbling skills was carried out using rubrics with three main indicators: ball control, speed, and maneuverability ((Barquero, 2024) (Eldridge, 2023) (Kelly, 2022). Through the development of this model, it is hoped that a system of exercises that is fun, contextual Islamic, and measurable will be born.

1. Needs Analysis

The initial stage focused on identifying problems through two-day field observations, interviews with PJOK teachers and the head of SD IT Mutiara Duri, as well as data analysis of 30 students in grades 4-6 (ages 9-12 years). Findings: only 8% of students were fluent in dribbling over 5 obstacles/1 minute, 92% failed on ball control, speed, and maneuverability, inhibiting factors included monotonous imitation exercises of adults, a tight religious-academic schedule (30% attendance), minimal facilities (narrow courts, limited cones). The analysis also confirms the need for specific models: age-adaptive, progressive multimedia, and Islamic integration to increase motivation by 25%, resulting in a baseline for prototype design (Rayanto, 2020).

At this stage, a preliminary study was also carried out in the form of observation of PJOK learning activities, analysis of teacher learning tools, identification of motor development characteristics of students aged 9–12 years, and literature review related to the dribbling practice model for elementary school children. The results of preliminary studies showed that 9-year-old students tended to need simple exercises based on ball control recognition, while 11–12-year-olds began to be able to receive simple combination exercises of maneuvers, speed, and decision-making in the game of soccer.

2. Design

Based on the analysis, a prototype structure was designed: 12 training sessions (60 minutes/session, 3x/week for 8 weeks) with 4 types of progressive adaptive ball mastery (sessions 1-3 for basic control), zig-zag cone (4-6 for agility), figure-8 turn (7-9 for maneuver), samba passing-dribbling (10-12 for skill integration). Specifications include Islamic opener ("Bismillah", safety

Progressive Dribbling Learning Model to Improve Dribbling Skills in Elementary School Children Aged 9–12 Years at SD IT Mutiara

prayer, motivation "trying to play right"), 1/2 circle area 20x15 m, tools (6 adjustable 1-2 m goals, uk. 4 4 410-450 g balls, 20 cones, stopwatch), 5-minute/session video tutorials, 3-indicator observation rubric (ball control, speed, maneuver) (Rayanto, 2020).

The design stage is directed at the preparation of the initial draft of the Progressive Islamic Soccer Dribbling Model (PISDM) which contains training objectives, core materials, learning steps, variety of activities based on age groups, training media, forms of evaluation, and learning instructions based on recreational activities. The initial draft model was then consulted with 2-3 validators consisting of PJOK experts, early childhood football coaches, and elementary school learning practitioners to obtain input related to the suitability of the material content, training safety, and child development characteristics.

At this stage, a more contextual and fun form of training instruction is also designed than just using monotonous verbal instructions. Teachers provide ice breaking, group yelling, sportsmanship motivation, simple competitive games, and strengthening the character of discipline and cooperation during the exercise so that students are more active and do not get bored quickly.

3. Development

The prototype was developed into a practical guide: a 12-session ready-to-use lesson plan, a simple tutorial video script (record the local teacher via cellphone), printable rubric sheets and halal team building materials without hard contact. Initial validation was carried out via informal discussions with PJOK teachers and sports experts, revising elements such as video duration (adjusted to a busy schedule) and recycling tools (plastic bottle cones) (Rayanto, 2020).

The development stage in this study is directed at the development of progressive dribbling training model products in the form of model manuals, training tutorial videos, dribbling skill assessment rubrics, and PJOK teacher implementation guides. Development is carried out through gradual revision based on the results of expert validation, so that the resulting model is not only theoretically feasible but also practical for use in elementary schools with limited facilities.

Expert validation was carried out to assess aspects of the content of the material, suitability of age characteristics, safety of training, clarity of instruction, implementation in elementary schools, and attractiveness of the training model. The results of the validator's input were used to improve the form of exercise, the duration of activities, the variety of games, and the use of simple training media based on tools that are easy to find in schools.

4. Implementation

The implementation of the dribbling training model in football was designed with a prototype structure: 12 training sessions (60 minutes/session, 3x/week for 8 weeks) with 4 types of adaptive progressive ball mastery (sessions 1-3 for basic control), zigzag cone (4-6 for agility), figure-8 turn (7-9 for maneuver), samba passing-dribbling (10-12 for skill integration). Specifications include Islamic openers ("Bismillah", safety prayers, motivation "trying to play right"), 1/2 circle area 20x15 m, tools (6 adjustable 1-2 m goals, uk. 4 410-450 g balls, 20 cones, stopwatch), 5 minute tutorial videos/sessions, 3-indicator observation rubric (ball control, speed, maneuver).

Prototype of a dribbling training model with 12 ready-to-use lesson plans, a simple tutorial video script (record local teachers via cellphone), printable rubric sheets and halal team building materials without hard contact. Initial validation was carried out via informal discussions with PJOK teachers and sports experts, revising elements such as video duration (adjusted to a busy schedule) and recycling tools (plastic bottle cones) (Sugiyono, 2016).

The implementation stage is carried out through two trial stages, namely small-scale trials and large-scale trials. A small-scale trial was conducted on 10 students aged 9–12 years to see the model's implementation, instructional clarity, and students' initial response to the exercise. After a revision of the results of the small test, the model was continued in a large-scale trial on 30 students of SD IT Mutiara Duri consisting of students in grades 4, 5, and 6.

The implementation of the PISDM model focuses on the application of progressive dribbling exercises based on recreational games, group activities, and active learning. Teachers act as facilitators who provide demonstration of techniques, learning motivation, and direct feedback on students' skill development during the exercise.

Progressive Dribbling Learning Model to Improve Dribbling Skills in Elementary School Children Aged 9–12 Years at SD IT Mutiara

Table 1 Forms of Dribbling Learning Model Programs

Sesi	Form of Training Model Program	Age Variation 9 years (Basic)	12 Year Age Variation (Competitive)	Duration	Key Indicators	Field Tools	Sound
1	Ball Mastery	Touch the free ball (in/outside of the foot) 20x, circle dribble 1 minute	Fake touch, body feint, 30x cepat	20 menit	Ball control	Balls uk.4, area 10x10m	1
2	Zig-Zag Cone	6 cone zig-zag lambat, stop-start 3x	8 cones, final sprint, shadow opponents	20 menit	Directional speed	20 cones, stopwatch, ½ circle 20x15m	2
3	Figure-8 Turn	Figure-8 2 cone lambat, turn sole foot	Figure-8 4 cone, step-over, 360° spin	10 menit	Manuver	6 gawang adjustable 1-2m	3
4	Samba PassingDribbling	Pass-dribble 1 v 1 halal (no tackle), grid 10x10m	2v2 samba turn, accurate pass, time competition	10 menit	Integrasi skill	Gawang kecil, bola, rubrik observasi	4

A. Data, Instruments

a. Data Collection Techniques

The main data collection used triangulation techniques, namely observation, skill tests, and interviews for high validity in the trial of the adaptive dribbling training model for 9-12 years old at SD IT Mutiara Duri.

1) Observations

Participatory observation was carried out twice daily (pre-post test) by 2 independent observers (PJOK teachers and researchers) using rubrics with specific indicators of dribble:

- (a) Ball control (precise touch, ball distance <1m from the foot, no >2x loss of the ball)
- (b) Speed (10m zig-zag travel time <15 seconds age 9 years, <12 seconds age 12 years)
- (c) Maneuver (successfully pass 5 cones 90%, smooth change of direction without stopping >80%)

Rating scale 1-4 (1=poor, 4=very good), total score of 28 maximum, category of very good (>22), good (16-22), fair (10-15), less (<10). Route test by dribbling a zig-zag ball 10m through 5 cones + 1 final goal in 60 seconds, videotaped for verification (Gani, 2025).

2) Skills Test

The standard dribbling test pretest-posttest is identical to the procedure of students starting from the line, dribbling a size 4 (410-450g) through 5 zig-zag cones (2m distance) + entering 1 adjustable goal (1-2m high) in 60 seconds in an area of 1/2 circle 20x15m ((Firmansyah, 2025) (Gani, 2025) (Rezky, 2024).

Table 1. Skills Test

Indicator	Measuring Instruments	Excellent Criteria
Ball Control	Watch + Video	Ball <1m feet, 90% touch accuracy
Speed	Stopwatch	<12 seconds (age 12), <15 seconds (age 9)
Maneuver	Number of successful cones	5/5 cone + non-stop goal

((Barquero, 2024) (Eldridge, 2023) (Kelly, 2022).

Total score = (40% control + 30% speed + 30% maneuver), target increase >25% gain score normalized ($g > 0.5$) ((Barquero, 2024) (Eldridge, 2023) (Kelly, 2022).

3) Interview

Posttest semi-structural interviews with 4 students (5 experiments, 5 controls) and PJOK teachers:

Question:

Progressive Dribbling Learning Model to Improve Dribbling Skills in Elementary School Children Aged 9–12 Years at SD IT Mutiara

- (a) "What's the most fun thing about this week's practice?"
- (b) "Do Bismillah prayers and Islamic motivations make you more enthusiastic?"
- (c) "How does a video tutorial help with the dribbling technique?"
- (d) Is the soccer dribbling practice model developed specifically for 9-12 year olds at SD IT Mutiara valid for use in training?
- (e) Is the soccer dribbling practice model developed for elementary school children aged 9-12 years at SD IT Mutiara
- (f) effective in improving dribbling skills?
- (g) What are the factors that hinder the development of dribbling skills in football for elementary school children aged 9-12 years at SD IT Mutiara?

Thematic analysis for qualitative triangulation (motivation, pleasure, perception of Islamic values).

4) Documentation

Supporting documentation includes daily attendance (target 92%), photos/videos of 3 representative sessions, student reflection sheets (Likert scale 1-4 on "fun exercises"), attendance and dropout records (Sugiyono, 2016).

Instruments

Table 2. Dribbling Rubric Instrument Grid

No	Indicator	Activities	Skor
1	Ball control 1	Right ball touch (inside/outside of the foot)	1-4
2	Ball control 2	Ball distance from foot (<1 meter)	1-4
3	Ball control 3	Frequency of ball loss ($\leq 2x$ in 60 seconds)	1-4
4	Speed 1	Travel time 10m zig-zag (age 9 years: <15 seconds)	1-4
5	Speed 2	10m zig-zag travel time (age 10-12 years: <12 seconds)	1-4
6	Maneuver 1	Successfully passed 5 cones (90% successful)	1-4
7	Maneuver 2	Non-stop adjustable goal entry (1-2 m high)	1-4

Modified from ((Barquero, 2024) (Eldridge, 2023) (Kelly, 2022).

B. Data Collection Techniques

Data Analysis Techniques

The data analysis techniques for the development of the dribbling training model are as follows: Qualitative data analysis uses thematic analysis from (Miles, 1994) to process the results of 2-day field observations, in-depth interviews (PJOK teachers, principals of SD IT Mutiara Duri), and documentation (lesson schedules, facilities, extracurricular attendance). The data reduction stage identifies 5 main themes:

- (a) Baseline dribbling ability (8% of students are fluent).
- (b) Inhibiting factors (40% religious schedule, monotonous exercise).
- (c) Specific needs of 9-12 years old (control, agility, maneuver).
- (d) Islamic context (Bismillah prayer, halal games).
- (e) Limited facilities (20x15m field, limited cone). Data display in the form of a needs matrix results in the foundation of prototype design.

Systematic content analysis of national and international journals on elementary dribbling models identified research gaps that there has been no research on dribbling development in football in the 9-12 year age range at Riau multicultural integrated Islamic elementary schools. Comparative coding compares existing models (ball mastery, zig-zag, figure-8) with local needs, finding 3 shortcomings. first, there is no Islamic integration. Second, there is a lack of multimedia for urban children. Third, it is not contextual about the tight schedule of elementary school IT. The results of this analysis became a theoretical blueprint for the structure of the 12 adaptive sessions of the prototype (Miles, 1994).

The Content Validity Ratio (CVR) was calculated from the assessment of 3 PJOK experts on the 12-session RPP prototype, assessment rubric, and 5-minute tutorial video script. The validation rubric includes: relevance of the age of 9-12 years, Islamic suitability, minimal facility feasibility, potential effectiveness. Formative revisions are carried out based on expert opinions (video duration, 4 minutes, recycled bottle cones, contactless halal team building). The criteria for feasibility of the study was CVR ≥ 0.7 . The descriptive analysis resulted in final product specifications in the form of a dribbling skill model with 12 printready sessions (60 minutes/session, 3x/week, 8 weeks), a printable Jonedu rubric (scale 1-4, 28 points maximum), a cellphone video tutorial guide

Progressive Dribbling Learning Model to Improve Dribbling Skills in Elementary School Children Aged 9–12 Years at SD IT Mutiara

(ball mastery, samba passing), and 4) Islamic reflection sheets. Recommendations for dissemination of the extracurricular Merdeka curriculum, teacher training of PJOK Riau, replication of Indonesian integrated Islamic Elementary Schools (Miles, 1994).

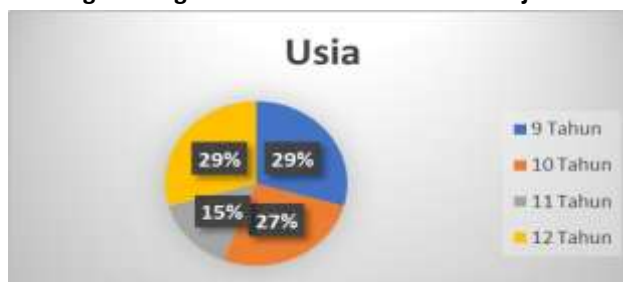
III. RESULT

This research is research and development which aims to produce a learning model of dribbling skills for elementary school students aged 9-12 years. The product developed is in the form of an educational practice learning model that is composed of several learning sessions, accompanied by one skill assessment instrument that is used consistently in each session. To produce a learning model that is systematic, tested, and in accordance with the characteristics of students, this study adapts the ADDIE development model, which includes five stages: Analysis, Design, Development, Implementation, and Evaluation.

The selection of the ADDIE model is based on the consideration that this model provides a coherent framework ranging from the analysis of needs in the field, the design of learning activities, the development of training forms and assessment instruments, trials in the real classroom context, to the evaluation of the success of the developed learning model. Thus, every step taken by the researcher has a clear basis and can be scientifically accounted for. In addition, the flexible character of the ADDIE model allows researchers to carry out revision and improvement processes at each stage if weaknesses or inconsistencies are found, so that the resulting dribbling learning model is expected to be completely in accordance with the physical, psychological, and social abilities of elementary school students aged 9–12 years.

The subjects in this study are students in grades 4–6 at SD IT Mutiara Duri who are 9–12 years old. The research subjects were used as participants in a trial to develop the Progressive Dribbling Model to improve dribbling skills in elementary school children. The number of research subjects was 34 students who had diverse characteristics of football playing ability. The selection of this subject was carried out to determine the effectiveness of the model developed in improving dribbling skills according to the stages of motor development of elementary school-age children.

Figure 1 Age Distribution of Research Subjects



Sumber: Data primer, 2026

Based on the images, the subjects were dominated by 9-year-olds and 12-year-olds (29%), respectively, which suggests that this group was most active in the dribbling model trials.

2. Description of Data Collection Time

The implementation of data collection in this study was carried out in several stages of scheduled meetings to ensure the consistency of the trial process of the Progressive Islamic Soccer Dribbling Model (PISDM). The distribution of the implementation time shows the distribution of the number of subjects in each data collection session, which is presented in the following table.

Figure 2 Distribution of Playing Positions



Sumber: Data primer, 2026

3. Description of the Subject's Weight

The weight distribution of the research subjects was used to describe the physical characteristics of the participants of the Progressive Islamic Soccer Dribbling Model (PISDM) model, because anthropometric aspects such as weight can affect agility, balance, and dribbling ability. The distribution of the weight categories of the research subjects is presented in the following table.

Figure 3 Description of Subject's Weight



Sumber: Data primer, 2026

Based on the weight distribution of the respondents, the weight groups of 36–41 kg and 42–47 kg had the highest frequency, each as many as 9 people or around 26.47% of the total respondents. Furthermore, the 30–35 kg range consists of 7 people (20.59%), while the 24–29 kg range consists of 5 people (14.71%). The lowest frequency was in the range of 48–53 kg, which was 4 people (11.76%).

4. Description of the Subject's Height

The height distribution of the subjects of this study is presented to illustrate the anthropometric characteristics of participants who participated in the Progressive Islamic Soccer Dribbling Model (PISDM) trial, because height can affect step range, body balance, and the effectiveness of ball control when dribbling. The distribution of the height of the research subjects is shown in the following table.

Figure 4 Description of Subject's Height



Sumber: Data primer, 2026

Based on the height distribution of respondents, the range of 144–149 cm is the group with the highest frequency, which is 11 people or around 32.35% of the total respondents. The range of 150–155 cm was next with 8 people (23.53%). Meanwhile, the range of 138–143 cm and 156–161 cm consisted of 6 people (17.65%) respectively. The lowest frequency was found in the range of 132–137 cm, which was as many as 3 people (8.82%).

5. Dribbling Skills Pretest and Posttest Results

The results of dribbling skill measurement were carried out using four types of boomerang dribble test, triangle dribble test, modified slalom dribble test, and illinois football dribble test with the following results:

Progressive Dribbling Learning Model to Improve Dribbling Skills in Elementary School Children Aged 9–12 Years at SD IT Mutiara

No	Boomerang Dribble Test	
	H1	H2
1	32,25	30,41
2	26,89	26,46
3	29,4	29,56
4	44,47	40,38
5	47,21	42,68
6	26,16	26,72
7	32,92	34,22
8	29,74	29,25
9	30,36	24,27
10	30,39	35,48
11	30,54	27,66
12	31,1	29,95
13	29,59	31,23
14	28,37	26,91
15	29,25	26,59
16	28,25	25,7
17	27,85	28,23
18	30,45	30,68
19	31,39	31,33
20	27,21	26,73
21	34,17	37,2
22	38,03	44,3
23	31,95	40,24
24	31,25	38,12
25	30,72	38,12
26	36,32	42,28
27	35,97	40,07
28	37	41,5
29	35,11	41,6
30	34,33	40,1
31	42,41	51,14
32	26,89	29,17
33	37,05	45,47
34	32,05	40,1

IV. DISCUSSION

The results of the description of the research subjects showed that the trial participants amounted to 34 students in grades 4–6 of SD IT Mutiara Duri with an age range of 9–12 years. The age distribution showed that the age group of 9 years and 12 years was the most dominant group, accounting for 29% of the total study subjects, respectively. The age distribution showed that the developed model was tested on participants who were in the phase of basic motor development until transitioning to more complex movement skills. This condition is in accordance with the purpose of developing a progressive dribbling model designed to improve dribbling skills according to the developmental characteristics of elementary school children.

Progressive Dribbling Learning Model to Improve Dribbling Skills in Elementary School Children Aged 9–12 Years at SD IT Mutiara

Anthropometrically, the research subjects had a weight distribution dominated by the range of 36–41 kg and 42–47 kg, each as many as 9 students (26.47%). Meanwhile, the height distribution showed the largest concentration in the range of 144–149 cm as many as 11 students (32.35%), followed by the range of 150–155 cm as many as 8 students (23.53%). The relatively even distribution of weight and height showed that the subjects had physical characteristics that were quite representative for children aged 9–12 years, so the application of the dribbling model could be tested on various conditions of participants' physical abilities.

Based on these characteristics, the main need of the research subject is the existence of a dribbling learning model that is systematic, gradual, and in accordance with the level of motor development of elementary school children. At the age of 9–12 years, learners are experiencing the development of movement coordination, balance, agility, and body control that are essential in dribbling skills. These findings are in line with research in the field of youth soccer development which states that in the adolescent age group, differences in technique performance are more influenced by training experience (Zainuddin et al., 2025).

1. Description of Data Collection Time and Trial Implementation

The implementation of data collection is carried out in stages in several sessions to maintain the consistency of the learning process and the evaluation of dribbling skills. This gradual approach is in accordance with the principle of distributed practice, which is that learning divided into several sessions is more effective in improving motor skill retention than centralized learning. These results are strengthened by the opinion of S. Putra et al. (2023) who stated that learning that is carried out periodically and systematically allows the athlete's body to adapt to the given learning load.

This adaptation not only enhances the body's capacity to handle increasingly demanding training loads but also strengthens the athlete's resilience in coping with training pressures. Furthermore, structuring training into multiple progressive sessions aligns with the principle of distributed practice, which emphasizes that spaced training is more effective for motor skill retention than concentrated training (Prebiyanto et al., 2025). A systematic, progressive training approach contributes to greater stability in mastering fundamental techniques and facilitates optimal physical adaptation for the athlete.

2. Anthropometric Characteristics of the Subject (Weight and Height)

The results of the anthropometric description showed that the study subjects had physical characteristics that were in accordance with the age range of 9–12 years. The weight distribution was dominated by the 36–41 kg and 42–47 kg groups, each amounting to 9 students (26.47%), while the height distribution was dominated by the 144–149 cm range of 11 students (32.35%). The relatively even distribution of weight and height showed that the study subjects had physical characteristics that were quite representative of elementary school children in the growth phase. This condition allows the implementation of a progressive dribbling model trial in participants with varying levels of physical development but still in the same age range.

The results of this description can be supported by a statement (De Lima et al., 2025) that explains that gross motor ability is basically influenced by height and weight, especially in individuals who are still in the growth period. Being overweight can hinder motor performance because it reduces fitness and limits range of motion, while being too underweight can also have an impact on decreased gross motor ability. This condition shows that physical composition can indeed affect motor activities such as running, jumping, and other sports skills. Samples that tend to be homogeneous in the height and medium weight categories cause the influence of physical factors to be more controlled, so that the improvement of dribbling skills is more reflective of the contribution of motor coordination and the effectiveness of the learning model given.

Based on the anthropometric characteristics of the subjects, the influence of physical differences on the results of the study can be controlled because all participants are in the same relatively same age group and are still in the normal growth category of elementary school children. Thus, the improvement in dribbling skills that occurred during the study reflected more on the effectiveness of the application of the Progressive Dribbling Model than the effect of differences in physical conditions between participants.

3. Dribbling Skills Pretest and Posttest Results

The results showed an increase in the average dribbling skills on all measurement instruments after the application of the Progressive Dribbling Model developed for students aged 9–12 years. Based on the results of descriptive statistics, the average score of the Boomerang Dribble Test increased from 32.56 in the pretest to 34.53 in the posttest. In the Triangle Dribble Test, the average score increased from 13.82 to 15.40. Furthermore, the Modified-Slalom Dribble Test has increased from 21.51 to 23.94. The Illinois Football Dribble Test showed the highest increase with an average difference of 3.33 points between the pretest and posttest. These results show that the learning model provided is able to improve the dribbling skills of elementary school students on various aspects of dribbling ability.

The improvement in dribbling ability can be attributed to the characteristics of the Progressive Dribbling Model which is arranged gradually according to the motor development of children aged 9–12 years. The learning program begins with ball

Progressive Dribbling Learning Model to Improve Dribbling Skills in Elementary School Children Aged 9–12 Years at SD IT Mutiara

mastery activities to improve basic ball control, followed by zig-zag cones to practice changes of direction and agility, figure-8 turns to develop maneuverability, and samba passing-dribbling that integrates dribbling, passing, and simple decision-making skills in the game. These learning stages provide a systematic stimulus so that students gain movement learning experience from the basic to more complex levels.

The results of this study can be supported by the findings of Lamak et al. (2023) who stated that game-based learning is able to improve ball control, courage, and dribbling skills in young students. This increase in ability occurs due to activities that involve game interaction, so that participants gain direct technical experience. Clemente et al. (2021) explained that learning that combines elements of technique and game can improve the quality of football skills because participants have the opportunity to touch the ball repeatedly in situations that resemble real games. Activities such as samba passing-dribbling and age-appropriate competitive variations allow students to gain hands-on technical experience so that dribbling skills develop more optimally.

Based on the results of the paired samples test, all instruments showed significance values below 0.05, namely the Boomerang Dribble Test ($p = 0.010$), the Triangle Dribble Test ($p = 0.002$), the Modified-Slalom Dribble Test ($p = 0.003$), and the Illinois Football Dribble Test ($p = 0.000$). All mean difference values are also negative, which indicates that posttest scores are higher than pretest scores. It was concluded that the application of the Progressive Dribbling Model provided a significant improvement in the dribbling skills of students in grades 4–6 of SD IT Mutiara Duri.

The difference in the magnitude of the improvement in each instrument shows that each student has a different level of adaptation to the given form of learning. 9-year-old students tend to benefit more from the basic ball control aspect through simple ball mastery and zig-zag learning, while 11–12-year-old students show better development in the aspects of speed, maneuver, and change of direction through figure-8 turn learning and more competitive samba passing-dribbling. Nonetheless, the consistent improvements that occurred on all test types showed that the developed progressive training model was appropriate to the motor development characteristics of primary school children and was effectively used to improve dribbling skills at 9–12 years of age.

4. Descriptive Statistics and Effectiveness of the PISDM Model

Descriptive statistical results show that all instruments of dribbling skills have improved after the application of the Progressive Dribbling Model. Based on the comparison of pretest and posttest scores, there was an average increase in the Boomerang Dribble Test, Triangle Dribble Test, Modified-Slalom Dribble Test, and Illinois Football Dribble Test. These results show that the learning model developed is able to have a positive influence on improving the dribbling skills of students in grades 4–6 of SD IT Mutiara Duri.

The improvement of dribbling ability on all test instruments showed that the learning stages consisting of ball mastery, zigzag cone, figure-8 turn, and samba passing-dribbling were able to provide a skill stimulus that was in accordance with the characteristics of motor development of children aged 9–12 years. Ball mastery activities contribute to improved basic ball control, zig-zag cones help in the development of agility and change of direction, figure-8 turn improves maneuverability, while samba passing-dribbling integrates dribbling skills with simple decision-making in game situations.

A relatively larger improvement in tests involving changes in direction and maneuver suggests that the obstacle-based learning and motion variation applied in these models are effective in developing coordination, balance, and ball control. This condition is in line with the characteristics of elementary school-age children who are in the phase of developing basic movement skills and are beginning to be able to learn more complex movement patterns through learning that is carried out gradually and repeatedly.

These results reinforce the theory that learning that has a gradual level of complexity can increase neuromuscular adaptation more optimally (Aryadi & Irawan, 2026). In football, progressive learning methods have also been shown to improve the efficiency of movement and decision-making in real-life game situations (Mappanyukki & Aksir, 2025).

The effectiveness of the model was also strengthened by the results of statistical tests that showed significant differences between pretest and posttest values on all measurement instruments. These findings indicate that the developed Progressive Dribbling Model is feasible to use as an alternative model to learning dribbling skills for elementary school children aged 9–12 years. Through the stages of learning that are systematic, fun, and in accordance with the characteristics of student development, this model is able to improve ball control skills, speed of change of direction, agility, and maneuverability when dribbling in a soccer game.

V. CONCLUSIONS

Based on the results of the research that has been described, it can be concluded that several main points describe the condition of the subject, the implementation process, and the effectiveness of the learning model used in this study.

Progressive Dribbling Learning Model to Improve Dribbling Skills in Elementary School Children Aged 9–12 Years at SD IT Mutiara

1. The results of the needs analysis show that the dribbling skills of students aged 9-12 years at SD IT Mutiara Duri are still relatively low. Most students have difficulty controlling the ball, maintaining speed when dribbling, and making changes in direction and maneuvers that show the need to develop a learning model that is in accordance with the characteristics of motor development of elementary school children.
2. Based on the results of needs analysis and theoretical studies, a Progressive Dribbling Model consisting of four forms of learning was successfully designed, namely Boomerang Dribble, Triangle Dribble, Modified Slalom Dribble, and Illinois Football Dribble. The model is arranged gradually from low to high difficulty levels to develop aspects of ball control, speed, agility, and maneuverability according to the characteristics of motor development of children aged 9–12 years.
3. Validation results by physical education experts, football experts, and primary school sports learning practitioners show that the Progressive Dribbling Model has a high level of feasibility to be used as a dribbling skills learning model. The model developed is in accordance with the characteristics of students, learning objectives, and the condition of elementary school facilities and infrastructure.
4. The results of field trials show that the Progressive Dribbling Model can be applied well and is positively accepted by students and teachers. The implementation of the model through 12 learning sessions went according to plan, and students were able to follow each stage of learning gradually and showed that the model had a good acceptance rate to be used in learning activities and football learning in elementary schools.
5. The results of the effectiveness test showed that the Progressive Dribbling Model was effective in improving the dribbling skills of students aged 9–12 years. Improvements were seen in all measurement instruments, namely the Boomerang Dribble Test, Triangle Dribble Test, Modified Slalom Dribble Test, and Illinois Football Dribble Test. The results of statistical analysis showed a significant difference between pretest and posttest values with a significance value of less than 0.05, so the developed model proved to be effective in improving ball control, speed, agility, and maneuverability when dribbling.

ACKNOWLEDGMENT

Thank you to those who contributed to this research, especially the thesis supervisors in the master of sports science programme, Yogyakarta State University.

REFERENCES

- 1) Alfisahrin. (2025). PENGEMBANGAN MODEL PEMBELAJARAN INQUIRY DALAM DRIBBLING SEPAK BOLA BERBASIS PERMAINAN. *Jurnal Olahraga Rekreasi Samudra*, 8(2), 1–16.
- 2) Mappanyukki, A. A., & Aksir, M. I. (2025). Analisis Komprehensif Model Latihan Fisik dalam Cabang Olahraga Atletik: Tinjauan Literatur. *Jurnal Dunia Pendidikan*, 5(6).
- 3) Arga. (2025). Pelatihan Sepak Bola Berbasis Permainan untuk Meningkatkan Kerjasama Tim di Kalangan Siswa SD Negeri 156 Buntu. *Jurnal Perjuangan Dan Pengabdian Masyarakat: JPPM*, 1(1), 26–34.
- 4) Aryadi, M., & Irawan, F. (2026). Membangun Daya Ledak Bola Voli Modern. *Kramantara JS*.
- 5) Bach. (2025). *Coaching Soccer For Dummies*. New York: John Wiley & Sons.
- 6) Bambang. (2024). PENGEMBANGAN PEMBELAJARAN BERBASIS KIDS ATHLETICS UNTUK MENINGKATKAN KETERAMPILAN MOTORIK SISWA SEKOLAH DASAR. Doctoral dissertation: UNIVERSITAS LAMPUNG.
- 7) Barquero. (2024). Psychometric validation of the tactical assessment instrument in football for use in physical education and with youth sport teams. *Perceptual and Motor Skills*, 131(2), 589–611.
- 8) Brink. (2023). Measuring skill via player dynamics in football dribbling. *Scientific Reports*, 13(1), 2–29.
- 9) De Lima, C. N., Mahuze, P. N., Lahinda, J., Riyana, M., Harahap, D. G. S., & Marlisa, D. (2025). Berat Badan, Tinggi Badan dengan Kinerja Motorik Kasar pada Anak Usia Dini. *Jurnal Pengabdian Masyarakat Dan Riset Pendidikan*, 3(4). <https://doi.org/10.31004/jerkin.v3i4.946>
- 10) Clemente, F. M., Ramirez-Campillo, R., Sarmiento, H., Praça, G. M., Afonso, J., Silva, A. F., Rosemann, T., & Knechtle, B. (2021). Effects of Small-Sided Game Interventions on the Technical Execution and Tactical Behaviors of Young and Youth Team Sports Players: A Systematic Review and Meta-Analysis. In *Frontiers in Psychology* (Vol. 12). <https://doi.org/10.3389/fpsyg.2021.667041>
- 11) Correia. (2023). *A people's history of football*. United Kingdom: Pluto Books.
- 12) Djangkaru. (2025). Penerapan Gerak Dasar Dalam Pendidikan Jasmani Melalui Olahraga Permainan Sepakbola Pada Anak Usia 8 Hingga 10 Tahun. *Jurnal Pendidikan Dasar, Menengah & Kejuruan*, 2(2), 11–15.

- 13) Duncan. (2022). Perceptions and practices of fundamental movement skills in grassroots soccer coaches. *International Journal of Sports Science & Coaching*, 17(4), 761–771.
- 14) Eldridge. (2023). Visual exploratory activity and practice design: Perceptions of experienced coaches in professional football academie. *International Journal of Sports Science & Coaching*, 18(2), 370–381.
- 15) Firdaus. (2025a). Pengembangan Model Latihan Dribbling Berbasis Android pada Permainan Sepakbola Usia 13-15 Tahun. *Jurnal Master Penjas & Olahraga*, 6(1), 627–635.
- 16) Firdaus. (2025b). Pengembangan Model Latihan Dribbling Berbasis Android pada Permainan Sepakbola Usia 13-15 Tahun. *Jurnal Master Penjas & Olahraga*, 6(1), 627–635.
- 17) Firmansyah. (2025). PENGEMBANGAN MODEL LATIHAN KOMBINASI PASSING DAN DRIBBLING DALAM PERMAINAN SEPAKBOLA DI SSB RAJAWALI MUDA FC U-13. Doctoral dissertation: UNIVERSITAS JAMBI.
- 18) Gani. (2025). Tingkat Keterampilan Menggiring Bola Siswa Sekolah Dasar dalam Kegiatan Ekstrakurikuler Sepak Bola. *Jambura Journal of Sports Coaching*, 7(1), 1–10.
- 19) Gani, A. A., Buhungo, Z., & Fataha, I. (2025). TINGKAT KETERAMPILAN MENGGIRING BOLA SISWA SEKOLAH DASAR DALAM KEGIATAN EKSTRAKURIKULER SEPAK BOLA. *Jambura Journal of Sports Coaching*, 7(1).
<https://doi.org/10.37311/jjsc.v7i1.29328>
- 20) Greve. (2022). Learning soccer in elementary school: Using teaching games for understanding and digital media. *In Frontiers in Education*, 7(8), 1–10.
- 21) Ihsan. (2022). Practical group defense exercise design in football game for 13-year-old students. *Physical Education Theory and Methodology*, 22(2), 194–201.
- 22) Kelly. (2022). A multidisciplinary investigation into the talent development processes at an English football academy: A machine learning approach. *Sports*, 10(10), 159–161.
- 23) Kolovelonis. (2023). Acute enhancement of executive functions through cognitively challenging physical activity games in elementary physical education. *European Physical Education Review*, 29(2), 268–285.
- 24) Lamak, A., Maulidin, M., & Nurdin, N. (2023). Pengaruh Latihan Drop Off dan Musical Ball Terhadap Kemampuan Dribbling Pemain HIMLA FC. *Gelora: Jurnal Pendidikan Olahraga Dan Kesehatan IKIP Mataram*, 10(1), 251–263.
- 25) Merino. (2023). Case study on evaluation in the formative dynamics of school soccer: results-driven arbitrariness. *Sport, Education and Society*, 28(7), 771–784.
- 26) Miles, H. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: SAGE Publications.
- 27) Nasution. (2025). Meningkatkan keterampilan menggiring bola melalui metode latihan zig-zag dalam permainan sepak bola pada Siswa Kelas V SD Negeri 200119 Padangsidempuan. Doctoral dissertation: UIN Syekh Ali Hasan Ahmad Addary Padangsidempuan.
- 28) Onwumechili. (2024). *Women’s football in Africa*. New York: Routledge.
- 29) O’Sullivan. (2023). Utilising the learning in development research framework in a professional youth football club. *Frontiers in Sports and Active Living*, 5(1), 33–44.
- 30) Prebiyanto, P., Rusdiana, A., Umaran, U., Imanudin, I., Haryono, T., & Ikhwan, I. (2025). Pengaruh Metode Distributed dan Massed Practice terhadap Shooting Free Throw dalam Permainan Bolabasket. *JURNAL PENDIDIKAN OLAAHRAGA*, 15(2).
<https://doi.org/10.37630/jpo.v15i2.2590>
- 31) Putra, G. N., Bakhtiar, S., Masrun, M., & Komaini, A. (2022). Perbedaan Karakteristik Kemampuan Koordinasi Gerak Berdasarkan Usia dan Jenis Kelamin Siswa di Sekolah Dasar Negeri Kecamatan Air Hangat Barat. *Jurnal Patriot*, 4(4).
<https://doi.org/10.24036/patriot.v4i4.893>
- 32) Putra, S., Emral, E., Arsil, A., & Sin, T. H. (2023). Konsep model latihan fisik pada sepakbola. *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia*, 9(2). <https://doi.org/10.29210/1202323429>
- 33) Rahmani, G. Y., Septiadevana, R., Rizki, H. N., & Abdillah, M. H. (2024). PERKEMBANGAN MOTORIK PADA SISWA SEKOLAH DASAR USIA 7 - 8 TAHUN. *Tadzkirah : Jurnal Pendidikan Dasar*, 8(1).
<https://doi.org/10.55510/tadzkirah.v8i1.270>
- 34) Rayanto. (2020). *Penelitian pengembangan model addie dan r2d2: teori & praktek*. Pasuruan: Lembaga Academic & Research Institute.
- 35) Rezky. (2024). PENGEMBANGAN MODEL PEMBELAJARAN TEKNIK DASAR MENGGIRING (DRIBBLING) PADA SEPAK BOLA MELALUI PERMAINAN GOBAK SODOR PADA SISWA KELAS V SDN 129 PALEMBANG. Doctoral dissertation: UNIVERSITAS PGRI PALEMBANG.

- 36) Rock. (2023). 'Dribble dribble dribble! Dribbling is the most elementary in football': Doing inclusion in park-based children's sport. Berlin: The Language of Inclusion and Exclusion in Sports.
- 37) Sahabuddin, Hikmad Hakim, Muhammad Ishak, & Arman Fadillah. (2025). Pengembangan Media Pembelajaran Interaktif Berbasis Teknik Dasar Bola Basket untuk Meningkatkan Partisipasi Aktif Siswa. JIMAD: Jurnal Ilmiah Mutiara Pendidikan, 3(2). <https://doi.org/10.61404/jimad.v3i2.388>
- 38) Savelsbergh. (2026). The Athletic Skills Model: Optimising development for the football player of the (near) future. In Ecological Dynamics Approach to Football. New York: Routledge.
- 39) Shi. (2022). Assessment of the service quality measurement model for youth football academies. Sport Marketing Quarterly, 31(4), 305–321.
- 40) Sugiyono. (2016). Metode Penelitian Kuantitatif, Kualitatif Dan R&D. Bandung: Alfabeta.
- 41) Syukur. (2022). Pengembangan Model Latihan Teknik Dasar Dribbling Dalam Permainan Sepak Bola Untuk Siswa Sekolah Sepak Bola. Jurnal Edukasi Citra Olahraga, 2(1), 141–153.
- 42) Szerovay. (2023). Football in the Nordic countries: practices, equality and influence. New York: Taylor & Francis.
- 43) Tumanggor. (2025). Pengaruh pembelajaran permainan sepak bola terhadap tingkat kesegaran jasmani siswa kelas VI Sekolah Dasar (SD) Negeri 200212 Padangsidempuan. Doctoral dissertation: UIN Syekh Ali Hasan Ahmad Addary Padangsidempuan.
- 44) Turner. (2023). The safe standing movement in football: Fan networks, tactics, and mobilisations. New York: Routledge.
- 45) Waruwu. (2024). Metode Penelitian dan Pengembangan (R&D): Konsep, Jenis, Tahapan dan Kelebihan. Jurnal Ilmiah Profesi Pendidikan, 9(2), 1220–1230.
- 46) Wiguna. (2025). MODEL PERMAINAN LOKOMOTOR DAN MANIPULATIF BERBASIS KETERAMPILAN DASAR SEPAK BOLA DALAM PEMBELAJARAN PJOK DI SD. Jurnal Edukasi Citra Olahraga, 5(3), 351–362.
- 47) Williams. (2022). The History of Women's Football. Barnsley: Pen & Sword History.
- 48) Zainuddin, M., Usman, A., Juhanis, J., Sudirman, S., & Iskandar, I. (2025). KONDISI FISIK OPTIMAL UNTUK PEMAIN SEPAK BOLA REMAJA. Jurnal Pendidikan Jasmani Kesehatan Dan Rekreasi (Penjaskesrek), 12(2), 180–190.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non-Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.